Insert picture: A family sitting down to eat a healthy meal together OR someone shopping at a farmer's market

Insert picture: A woman breastfeeding

Insert picture: Kids playing outside (the opposite of kids watching TV)

Insert picture: Older adults in a yoga class OR people at the gym OR people walking

Rhode Island's Plan for Healthy Eating & Active Living:

2006 – 2012

Rhode Island Department of Health

Initiative for a Healthy Weight

June 2006

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Many people believe that dealing with overweight and obesity is a personal responsibility. To some degree, they are right, but it is also a community responsibility. When there are no safe, accessible places for children to play or adults to walk, jog or ride a bike, that is a community responsibility. When school lunchrooms or office cafeterias do not provide healthy and appealing food choices, that is a community responsibility. When new or expectant mothers are not educated about the benefits of breastfeeding, that is a community responsibility. When we do not require daily physical education in our schools, that is also a community responsibility. There is much we can and should do together.

—David Satcher, MD, PhD, US Surgeon General, *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity 2001*

I. State Plan

Purpose of the Plan

Rhode Island's State Plan for Healthy Eating and Active Living is a call to action for Rhode Island schools, childcare providers, worksites, health care providers, insurers, communities, and policy makers to implement changes that will promote and support healthy eating and active living. The plan is a roadmap that can guide the way to preventing and reducing the prevalence of overweight and obesity among all Rhode Islanders.

The goals of the plan are to:

- Involve schools, childcare providers, worksites, health care, and communities in obesity prevention and reduction efforts;
- Identify evidence-based and promising strategies for improving nutrition, increasing breastfeeding initiation and duration, increasing physical activity, and reducing screen time (e.g., sedentary time spent watching television or playing video games);
- Encourage collaboration between partners by identifying shared priorities;
- Coordinate state overweight and obesity prevention efforts to have a greater statewide impact, leverage funding, and avoid duplication

Many individuals and organizations can use the plan, including:

- Schools administrators and educators
- Childcare providers
- Business owners and managers
- Insurers
- Physicians and health care providers
- Community-based organizations
- Minority health organizations
- Faith-based organizations
- Restaurant owners and managers
- Grocery store owners and managers
- Local officials
- Municipal planners
- Transportation engineers
- Fitness center owners and managers
- Food vendors and distributors
- Public policy advocates
- Professional organizations
- Researchers
- Community coalitions
- Media

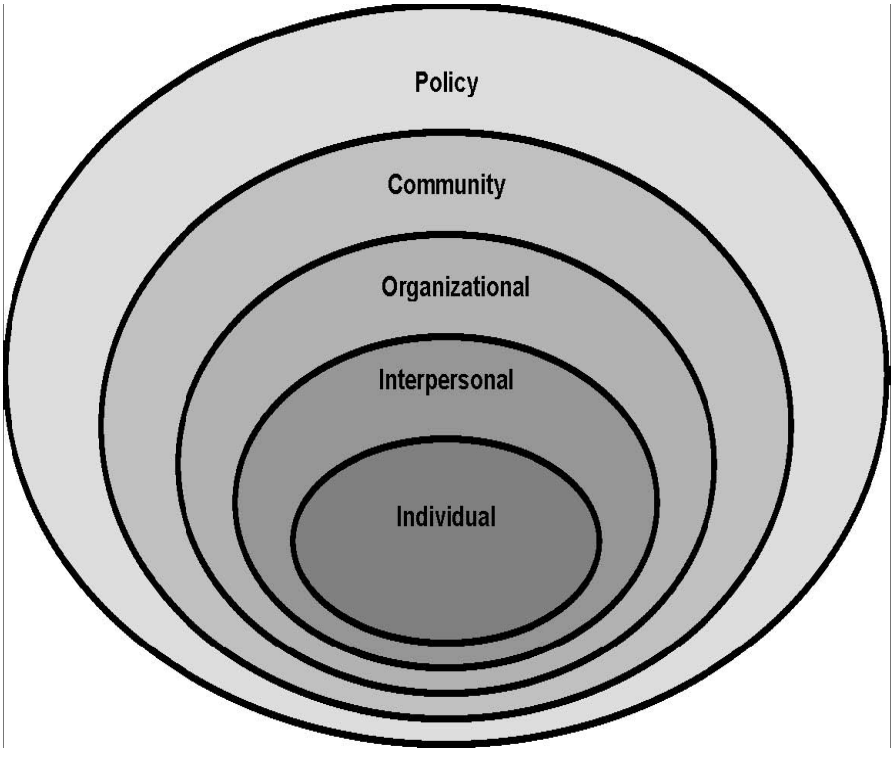
Theoretical Framework of the Plan

Overweight and obesity are difficult problems to solve. The behaviors that lead to obesity are influenced by the social and physical environment - forces that are outside of individual control. The Socioecological Model provides a framework for understanding the important role the social and physical environment plays in shaping individual behavior. The model identifies five levels of influence on health behavior: individual, interpersonal, organizational, community and policy. The plan was developed to identify objectives and strategies that will affect all levels of this model.

At the center of the model displayed below is the individual. Interventions that target the inner levels of the model provide education, skills, and peer support that can help a person decide to change their eating or activity habits. Interventions at the individual and interpersonal levels can teach people why they should engage in healthy behaviors and provide them with the skills and support they may need to overcome barriers and be successful.

Surrounding the individual are the layers of the environment that influence health decisions. Interventions that target the outer levels of the model change the social, environmental, and policy factors that make it easy or difficult for people to act on the health information they receive from family, friends, health care providers, and the media among other sources. Interventions that target the organizational, community, and policy levels may change a person's surroundings to make it easier, more convenient, safer, and less costly to adopt healthy behaviors.

The best route to sustainable behavior change is to target both the individual and the many outside forces that influence the individual. In this way, behavior change is supported by an environment that makes the healthy choice the easy choice.



Individual
Knowledge, skills, attitudes, beliefs and behaviors

Interpersonal
Family and peers that influence an individual's social identity and role(s)

Organizational
Rules, regulations, formal and informal policies and procedures

Community
Social networks and norms

Policy
Local, state and federal policies

Development of the Plan and Involvement of Stakeholders

The plan was developed as a collaborative effort between federal, New England regional, state and community-based partners and the *Initiative for a Healthy Weight*, Rhode Island's obesity prevention and control program.

Step 1: Initiative for a Healthy Weight

In 2000, The Rhode Island Department of Health (HEALTH) was one of the first six states to receive funding from the U.S. Centers for Disease Control and Prevention (CDC) to prevent and control overweight and obesity. HEALTH established the *Initiative for a Healthy Weight* (IHW) to build the state's capacity to address the factors that contribute to overweight and obesity. As an initial step in the capacity building process, IHW convened individuals and organizations addressing obesity, nutrition, and physical activity to help develop a state plan.

Step 2: Obesity Planning Council

IHW convened the Obesity Planning Council (OPC) in 2000 to develop recommendations for the plan. Over 100 OPC members represented government agencies, professional organizations, hospitals, insurers, advocacy groups, minority health organizations, other community-based and faith-based organizations, academic institutions, local businesses, and interested community members (**Appendix X**). During a two-year period, the OPC used scientific literature, best and promising practices, the Socioecological Model, national guidelines and their knowledge and experience to develop a set of recommendations for Rhode Island schools, worksites, health care settings, and communities that considered the state's specific challenges and resources.

The vision, mission, goals and overarching strategies of IHW are as follows:

Vision: A Rhode Island where healthy communities support healthy eating and active living.

Mission: The mission of the Initiative for a Healthy Weight (IHW) is to prevent overweight and obesity among all Rhode Islanders. IHW coordinates, supports, and implements activities to promote lifelong healthy eating and active living through partnerships, community capacity building, policy and environmental changes, and targeted interventions.

Goal: Lead Rhode Island in achieving the objectives of the state intervention plan for healthy eating and active living.

Objectives:

1. Reduce the prevalence of overweight and obesity by increasing physical activity, improving nutrition, increasing breastfeeding and decreasing screen time.

2. Reduce disparities in the prevalence of overweight and obesity.

Strategies:

- Build and sustain partnerships for communication, coordination and collaboration.
- Build community capacity through technical assistance, training, and resource development.
- Develop and support policy and environmental improvement initiatives for healthy communities.
- Implement CDC-supported targeted interventions in selected populations.

Step 3: Draft Plan

Building on the work of the OPC and using the CDC State Plan Index as a guide, IHW developed a draft plan with measurable objectives for healthy eating and active living in Rhode Island. In 2005, the draft plan was distributed to state and community-based partners for feedback and revision.

Step 4: Childhood Obesity Priority and Action Teams

In 2005, David R. Gifford, MD, MPH, Director of HEALTH, declared childhood obesity a priority for the state and initiated the formation of five Childhood Obesity Action Teams (COATs):

- Early Childhood
- School Age Children
- Communities
- Data and Surveillance
- Communication and Media

The COATs included community representatives, professional groups, health care providers, researchers and state agencies and were staffed by select programs in HEALTH's Division of Family Health and IHW, located in HEALTH's Division of Community Healthy and Equity. Each COAT was charged with using the draft plan objectives to develop their respective action plans. The COATs also provided IHW with recommendations for the draft plan.

Step 5: Leadership Summit

In January 2006, IHW convened federal, New England regional, state and community nutrition and physical activity leaders to assess current initiatives, identify priorities for IHW, and strategize how stakeholders could assist in these efforts. IHW used the information gleaned from this Summit to create a final set of objectives to present to all partners for review and comment.

Step 6: Plan Revision

Based on recommendations from OPC members, the COATs, and the participants of the January 2006 Leadership Summit, IHW revised the plan.

Step 7: Healthy Eating and Active Living Collaborative

At the first annual Healthy Eating and Active Living Summit in June 2006, IHW convened OPC members, COATs, Leadership Summit participants and new partners with the formation of the *Healthy Eating and Active Living Collaborative*. The *Collaborative* will be instrumental in implementing the plan. The *Collaborative*'s first charge was twofold: 1) to finalize the plan objectives, and 2) to identify priority objectives for implementation. At the Summit, nine (9) workgroups formed or expanded:

- Early Childhood Settings
- Schools and After School Programs
- Health Care and Health Plans
- Worksites
- Access to Physical Activity (Built Environment)
- Access to Healthy Foods (Built Environment)
- Community Programs and Resources
- Data and Surveillance
- Communication and Media

These workgroups (**Appendix X**) provided valuable feedback that IHW used to finalize and prioritize objectives for the plan.

Step 8: Final Revisions

The plan was posted on the IHW website for a week-long public review period, and presented at HEALTH via a public forum. This plan reflects all of the recommendations garnered to date from a diverse group of partners representing Rhode Island's challenges and resources. In addition, this plan emphasizes the special needs and tailored strategies for increasing healthy eating and active living among Rhode Island's underserved and racial and ethnic minority populations.

Keeping the Plan Current

This plan is a starting point for coordinated statewide obesity prevention efforts. The short-term objectives in the plan cover a two to three year timeframe, at which point it will be necessary to evaluate progress and revisit the objectives. IHW and the *Collaborative* will review the plan on an ongoing basis to establish an annual agenda for obesity prevention and control in Rhode Island. Via the IHW, the *Collaborative* will also be presented with current, evidence-based recommendations for improving nutrition, increasing breastfeeding initiation and duration, increasing physical activity, and reducing screen time. This plan and any subsequent versions will be posted on the IHW website at http://www.health.ri.gov/disease/ihw/index.php. To evaluate implementation of the plan, IHW will issue yearly reports on progress made towards

meeting the objectives. These reports will be presented at annual Summits of the *Collaborative*, posted on the IHW website, and submitted to the CDC. As progress is made towards meeting the priority objectives, additional objectives may emerge as priorities, and appropriate strategies for implementation will be developed under the auspices of the *Collaborative*.

II. Overweight and Obesity

Defining Overweight and Obesity

Overweight and obesity refer to ranges of weight that are greater than what is generally considered healthy for a given height. The terms also identify ranges of weight that have been shown to increase the likelihood of certain chronic diseases and other health problems.

Adults

For adults, overweight and obesity ranges are determined using weight and height to calculate a number called the "Body Mass Index" (BMI). BMI is used because, for most people, it relates to their amount of body fat.

This is the mathematical formula for calculating BMI; however, most people refer to standard BMI charts to determine their BMI:

http://www.cdc.gov/nccdphp/dnpa/bmi/00binaries/bmi-adults.pdf

$$\text{BMI} = \frac{\text{(Weight in pounds)}}{\text{(Height in inches) x (Height in inches)}} \times 703$$

- An adult who has a BMI between 25 and 29.9 is considered overweight.
- An adult who has a BMI of 30 or higher is considered obese.

Height	Weight Range	BMI	Considered
5' 9"	124 lbs or less	Below 18.5	Underweight
	125 lbs to 168 lbs	18.5 to 24.9	Healthy weight
	169 lbs to 202 lbs	25.0 to 29.9	Overweight
	203 lbs or more	30 or higher	Obese

It is important to remember that although BMI relates to an individual's amount of body fat, BMI does not directly measure body fat. As a result, some people, such as athletes, may have a BMI that identifies them as overweight even though they do not have excess body fat.

Children

Body Mass Index (BMI) is a number calculated from a child's weight and height. For children and teens, BMI is age- and sex-specific and is often referred to as BMI-for-age. BMI is used as a screening tool to identify possible weight problems for children. CDC and the American Academy of Pediatrics (AAP) recommend the use of BMI to screen for overweight in children beginning at two years of age.

After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age. The growth charts show the weight status categories used with children and teens (underweight, healthy weight, at risk of overweight, and overweight).

BMI-for-age weight status categories and the corresponding percentiles are shown in the following table.

Weight status category	Percentile range
Underweight	Less than the 5th percentile
Healthy weight	5th percentile up to the 85thpercentile
At risk of overweight	85th to less than the 95th percentile
Overweight	Equal to or greater than the 95th percentile

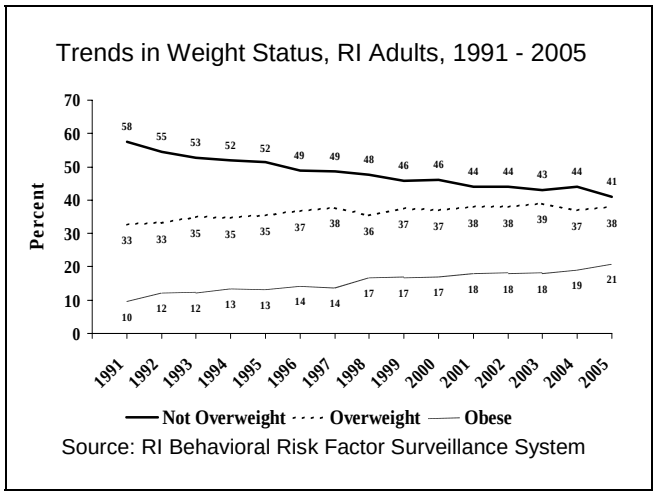
Although some use the terminology "at risk of overweight" to describe overweight children between the 85th and 95th BMI percentiles and "overweight" to describe obese children at or above the 95th BMI percentile, we have chosen to simplify this and use the same terminology of overweight and obese for both adults and children.

Throughout this plan, the term obese will be used when referring to children at or above the 95th BMI percentile and the term overweight will be used when referring to children between the 85th and 95th BMI percentiles.

Prevalence and Trends in Rhode Island

Adults

Based on Rhode Island data for the period 2002 to 2004, about 38%, or roughly 292,000 Rhode Island adults, 18 years of age and older, are overweight and 19% or about 144,000, are obese. This is 57% overall, more than half of all adults in the state. This compares with 37% overweight and 20% obese reported for the United States as a whole. The real proportions are likely to be higher because many adults under report their weight when asked. Actual measures of height and weight for Rhode Island adults are not available. However, results of a national study that weighed and measured adults, 18 years of age and older, found 66% were overweight or obese.

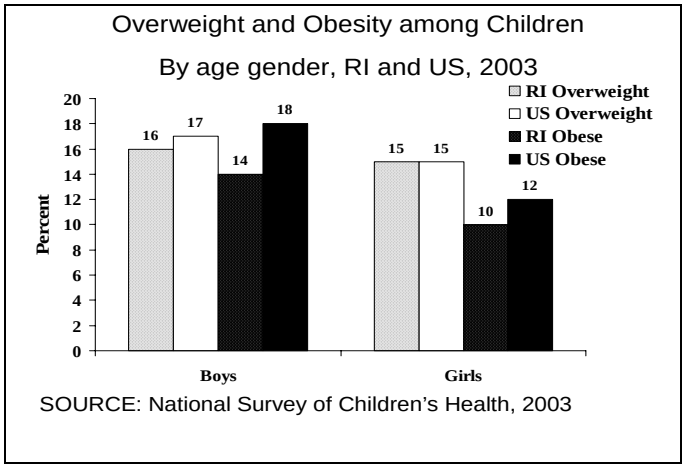


The proportion of both U.S. and Rhode Island adults who are overweight or obese has increased significantly over the past 15 years. While the United States as a whole narrowly surpasses Rhode Island in overweight and obesity, the trend is very similar.

Children

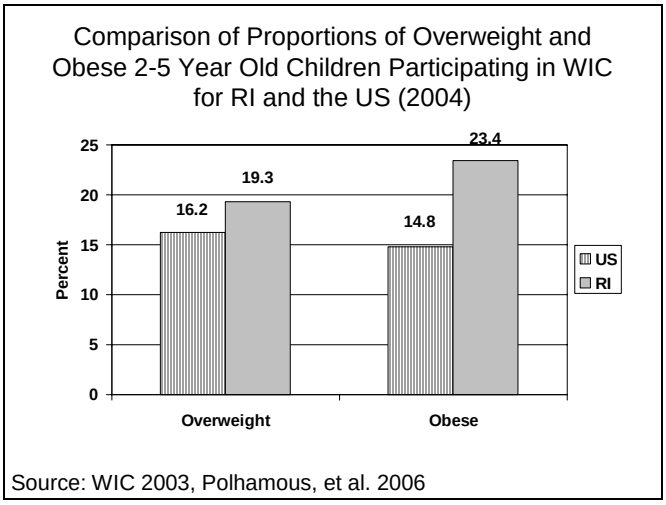
Marked increases in overweight and obesity among children have also been observed. These increases are extremely concerning due to the anticipated increases in diseases associated with overweight and obesity and increases in the already high costs associated with health care and loss of productivity in Rhode Island.

In the 2003 National Survey of Children's Health, parent-reported measures of height and weight for their children showed that about 15% of Rhode Island youth ages 6 to 17 (14% boys and 17% girls) are overweight and another 16% are obese (boys 17% and girls 15%). In comparison with 10 to 17 year old children throughout the country, the proportions of Rhode Island boys and girls who are overweight (16% and 15%) are similar to the proportions for all U.S. children (17% and 15%), but the proportions for obesity are much lower for Rhode Island (14% boys and 10% girls) compared the U.S. (18% boys and 12% girls). When surveyed directly, 13% of high school students report a height and weight consistent with obesity, and 15% with overweight.

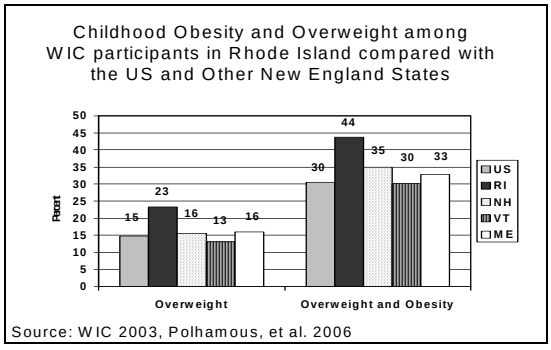


Nationally, the proportion of children who are obese has risen from about 5% in the early 1970s to the present levels of more than 15%. In Rhode Island, the proportion of high school students who report their height and weight consistent with obesity has increased from 9% to 13% and for overweight from 14% to15% from 2001 to 2005. Also, the percentage of kindergartners that are obese has increased from 17.3% in 2001-2002 to 20.3% in 2004-2005, a 3% increase, according to height and weight data collected by the Rhode Island Immunization Program.

The prevalence of obesity in younger children is of concern in Rhode Island. Data are only available for those participating in the U.S. Department of Agriculture's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which is limited to children of families who are less than or equal to 185% of the poverty level. Of two, three and four year old children in WIC, about 19% are overweight and 23% are obese. These proportions are considerably higher than the 16% and 15%, respectively, for U.S. preschool WIC children overall.



In Rhode Island, more WIC participating children are overweight and obese than U.S. WIC participating children as a whole. Rhode Island WIC children also are more likely to be obese than overweight, which is opposite from the national pattern. Also, compared to other New England states, Rhode Island has a higher proportion of WIC children that are overweight or obese.



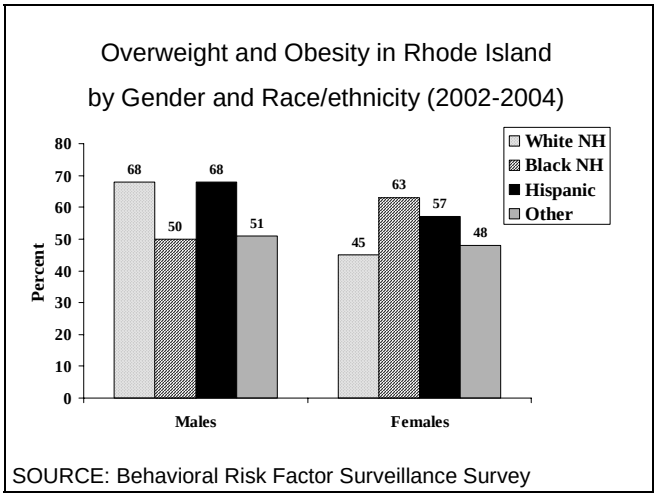
Conclusion

In Rhode Island, the prevalence and trends of overweight and obesity among adults and older children mirror those of the rest of the country. However, Rhode Island differs from the U.S. as a whole in its very high prevalence of overweight and obesity among young children.

Rhode Island Disparities in Overweight and Obesity

Adults

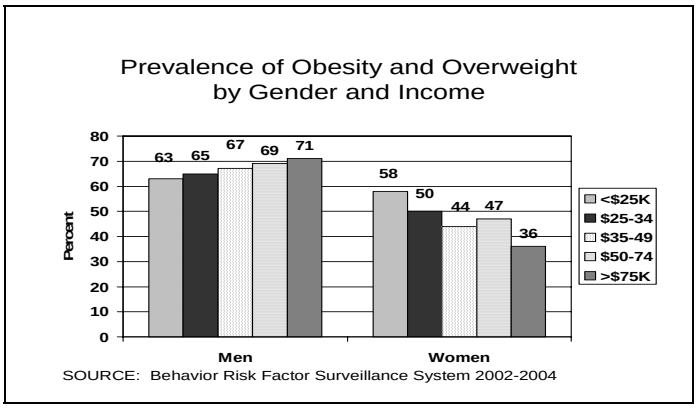
Rhode Island men are more likely to be either overweight (47%) or obese (19%) compared with Rhode Island women (29% and 18%). Rhode Island men exceed men nationally in the proportion who are overweight, but not the proportion who are obese. Rhode Island women are less likely to be overweight or obese than women nationally.



SOURCE: Behavioral Risk Factor Surveillance Survey

Of the 436,000 Rhode Island adults who are overweight or obese, the vast majority, about 364,000 persons, are non-Hispanic Whites. While the largest numbers of overweight or obese people in the state are non-Hispanic Whites, a higher proportion of Hispanic Rhode Islanders is overweight or obese (62%) than non-Hispanic White and Black Rhode Islanders (56% for each group).

There are also considerable disparities between and within racial and ethnic groups when males and females are considered separately (**Figure X**). White non-Hispanic men (68%) and Hispanic men (68%) are more likely to be overweight or obese than non-Hispanic Black men (50%). White non-Hispanic women (45%) are less likely to be overweight or obese than either Black non-Hispanic (63%) or Hispanic women (57%).



Many of the ethnic and racial disparities in overweight and obesity may be due to the underlying disproportionate amount of poverty among those groups and the commensurate lack of resources to obtain nutritious food and a safe environment for physical activity. Overweight and obesity are more common among women who are less educated or have lower incomes. Fifty seven percent (57%) of women with less than a college education were either overweight or obese compared with 37% of women who graduated college. Similarly, 58% of women with less than a $25,000 annual household income were overweight or obese compared with 36% of women with more than a $75,000 annual household income. In contrast, education does not appear to make a difference for men (66 to 67% overweight or obese at all levels of education), and higher income men are more likely to be overweight or obese (71%) than lower income men (63%). The disparities for men, as opposed to women, do not seem to be based on inadequate resources.

Children

Children 6 to 12 years of age are considerably more likely to be obese (22%) than children 13 to 17 years of age (8%). The proportion of Rhode Island children who are overweight is very similar to the U.S. as a whole, while Rhode Island children are slightly less likely to be obese.

In Rhode Island, about 15% of White children are overweight compared with 17% of Black children, and 34% of children whose parents report their race as “mixed”. This is similar to the U.S. as a whole, where the proportion of overweight children is 15% for White children, 17% for Black children, and 17% for children of mixed race. In Rhode Island, all racial groups are less likely to be obese compared with the national data, but in both state and national data, non-Hispanic Black children are at highest risk of obesity (27% in Rhode Island and 31% for the U.S.).

In Rhode Island, disparities by ethnicity in overweight and obesity among children exist as well. Hispanic children are also more likely to be obese (33%) than non-Hispanic children (14%), while non-Hispanic children are more likely to be overweight (16%) than Hispanic children (13%). Nationally, Hispanic children are at higher risk of both obesity and overweight compared with non-Hispanic children.

Children with less educated or lower income parents are also more likely to be obese than children of parents with a higher education or income. Of children in families with incomes

below twice the poverty level, 17% are overweight and 28% are obese. This is similar to 16% and 28%, respectively, for the U.S. as a whole.

Similar to the pattern for older children, Rhode Island WIC boys ages two, three and four are more likely (25.8%) than girls (20.9%) to be obese. There is no difference between boys and girls for the proportion who are overweight, which is about 19%. Children participating in WIC are also somewhat more likely to be overweight or obese if their mother spoke Spanish or if their mother was overweight. Rhode Island communities with the highest proportions of obese young children in WIC include Newport, Warwick and Central Falls. More than 27% of children participating in WIC in these communities are obese. Cranston (12.9%) and Woonsocket (13.4%) have the lowest proportions of obese children enrolled in WIC.

Conclusion

Adults in Rhode Island are at high risk of overweight and obesity, particularly White and Hispanic men, Black and Hispanic women, and low income women of all races and ethnicities.

The high proportion of overweight and obese children, especially young children is alarming, given that these children are at much higher risk of becoming overweight or obese adults, and of having an illness during childhood or later in life that is directly linked with their weight status. The risk profile for children seems to follow the pattern of women, such that there is a higher risk among Black and Hispanic women and children, but this disparity is not seen in men. While no discussion of race or ethnicity can disentangle the influences of genetics, culture and economic circumstance, targeting interventions toward low-income families, especially those of color, will likely impact Rhode Islanders at highest risk of overweight and obesity.

Obesity-Related Diseases and Conditions

Adults

Among U.S. adults, overweight and obesity increase the risk of developing coronary heart disease, stroke, type 2 diabetes, and certain types of cancer, four of the ten leading causes of death in the United States:

- Over 927,000 Americans die of coronary heart disease, stroke and other forms of cardiovascular disease each year—almost two deaths every minute. Two major risk factors for cardiovascular disease are high blood pressure and high cholesterol, both of which are linked to obesity. Weight gains as small as 10-12 pounds increase the risk of cardiovascular disease.
- The prevalence of type 2 diabetes has tripled in the last 30 years. Type 2 diabetes is a major cause of early death, cardiovascular disease, blindness, kidney disease, and loss of limbs. Overweight increases the chances of developing diabetes seven-fold, and obesity makes it 20 to 40 times more likely.

- Many types of cancer are associated with being overweight. In women, these include cancer of the uterus, gallbladder, cervix, ovary, breast, endometrium, and colon. Overweight men are at higher risk of developing colorectal cancer and prostate cancer.

In addition, overweight and obese adults are at increased risk of developing gallbladder disease, musculoskeletal disorders (arthritis, osteoporosis, and muscle and joint pain), and sleep apnea. Obese individuals may also suffer from social stigmatization and discrimination, leading to low self-esteem, depression and other psychological difficulties.

Rhode Island adults are affected by the health consequences of overweight and obesity. An estimated 208,000 Rhode Island adults have high blood pressure and 264,000 have high cholesterol. Approximately 48,000 Rhode Islanders have diabetes. As seen in national data, high blood pressure, high cholesterol, and diabetes are associated with weight status among Rhode Island adults (**Table X**). Among Rhode Island adults, those who are overweight or obese are more likely than those who are normal weight to have high blood pressure, high blood cholesterol or diabetes.

Obesity-related disease by weight status of RI adults, ages 18 and older, 2003 [1,2]

Weight status	High blood pressure % (95 CI)	High cholesterol % (95 CI)	Diabetes % (95 CI)
Under/Normal	18.5% (16.4 to 20.7)	25.7% (23.1 to 28.3)	3.3% (2.1 to 4.6)
Overweight	34.2% (31.3 to 37.1)	38.5% (35.4 to 41.7)	7.5% (6.1 to 9.0)
Obese	45.3% (41.1 to 49.6)	40.2% (35.8 to 44.5)	14.1% (11.3 to 17.0)

[1] Weighted percentages and unweighted sample
[2] High blood pressure = ever told have high blood pressure, excludes high blood pressure during pregnancy; High cholesterol = ever told have high blood cholesterol; Diabetes = ever told have diabetes by health care provider, excludes diabetes during pregnancy.
Source: Rhode Island BRFSS, 2003

Children

It is not just adults who are suffering the health consequences of obesity and overweight. The health effects of overweight in U.S. children include high blood pressure, high cholesterol, diabetes, orthopedic problems, low self-esteem and adult obesity:

- High blood pressure is increasingly common among children, and the risk of significantly elevated blood pressure has been found more commonly in overweight children and adolescents compared to their non-obese peers. A Louisiana community-based study found that 61% of overweight children, ages 5 to 10, already had at least one cardiovascular disease risk factor (high blood pressure or high cholesterol), and over 25% of overweight children had two or more risk factors.

- Once considered rare, type 2 diabetes in children is on the rise and is directly linked to obesity. If current trends continue, CDC estimates that one-third of all children, and about one-half of Black and Hispanic children, born in 2000 will develop type 2 diabetes.
- Overweight children are at added risk of developing orthopedic problems. In young children, excess weight can lead to bowing and overgrowth of leg bones. Increased weight on the growth plate of the hip can cause pain and limit range of motion.
- Overweight is associated with low self esteem in youth. Some obese children report increased rates of loneliness, sadness and nervousness. Overweight children and adolescents also report negative assumptions made about them by others, including being inactive or lazy, being stronger and tougher than others, not having feelings, and being unclean.
- About 50% of overweight adolescents will become overweight or obese adults.

Paralleling the increase in overweight and obesity, hospital discharge data indicate that the percentage of discharges with obesity-related diseases increased dramatically from 1979–1981 to 1997–1999 among children, ages 6 to 17. During this time frame, discharges for diabetes doubled, gallbladder disease tripled, and sleep apnea increased fivefold.

Currently, data is not available on the health impacts of obesity for Rhode Island children.

Disparities in Obesity-Related Diseases and Conditions

Because of the devastating impact of obesity on health status, racial and ethnic differences in obesity trends are widening existing health disparities. Many obesity-related diseases, such as heart disease, diabetes and cancer, are found at higher rates among racial and ethnic minority populations. These disparities in obesity-related health problems will only be worsened by the rise in overweight and obesity in these populations.

- The high prevalence of obesity is reported to be a contributing factor to the high prevalence of hypertension in minority populations, especially among Black or African Americans who have an earlier onset and run a more severe course of hypertension compared to Whites.
- Compared with Whites, Blacks or African Americans are at higher risk of heart failure and death from coronary heart disease. The high prevalence of obesity and obesity-related conditions, such as hypertension and type 2 diabetes, are factors reported to contribute to their high death rate from coronary heart disease.
- Diabetes has been reported to occur at a rate of 16 to 26% in Hispanic Americans and Blacks or African Americans, ages 45 to 74, compared with 12% in non-Hispanic Whites of the same age.
- Black or African Americans are more likely to die of cancer than people of any other racial or ethnic group. Obesity appears to contribute to the higher risk of pancreatic cancer among Black Americans than among Whites, particularly for women.

Long-Term Objectives to Reduce the Prevalence of Overweight and Obesity

CDC has identified the following three overarching goals for reducing the prevalence of overweight and obesity:

1. Prevent excess weight gain among children and adolescents.

2. Prevent excess weight gain among adults.

3. Achieve and maintain healthy weight loss among adults.

To achieve these goals, the IHW has identified the following long-term objectives for reducing the prevalence of obesity and overweight in Rhode Island.

Insert long term obesity objectives: Need to get this from Patti.

III. Target Behaviors

Intermediate Objectives: Individual Behavior Change

The long-term objectives of decreasing the prevalence of overweight and obesity cannot be achieved without changes in individual behaviors that contribute to energy imbalance.

Energy Imbalance

Overweight and obesity are a result of energy imbalance over a long period of time. Energy imbalance occurs when an individual consumes more calories than he or she uses or expends through normal daily metabolic functions and physical activity. The cause of energy imbalance for each individual may be due to a combination of several factors. Even small energy imbalances in consumption and expenditure over time can result in significant weight changes. For example, one 12-ounce regular soda (approximately 150 calories) consumed or 30 minutes of brisk walking each day can add or take off ten pounds of body weight per year, respectively. Energy balance is achieved when calories consumed are equal to calories used. Individual behaviors, environmental factors, and genetics all contribute to energy balance and the complexity of the obesity epidemic.

Although overweight and obesity are the result of complex interactions between genetic, physiological, metabolic, behavioral, environmental, cultural, and socioeconomic influences, the rapid increase in rates of overweight and obesity in the United States over the last several decades has occurred too rapidly for changes in genetic or physiological mechanisms to be the primary cause. Rather, the emerging epidemic can be attributed to changes in eating habits and physical activity levels resulting in an overall positive energy or calorie balance (i.e., more calories consumed than expended). In the simplest terms, overeating and insufficient physical activity are the underlying causes of the obesity crisis in our country.

CDC has identified the following four behaviors as the most promising individual behavior change strategies for reducing the prevalence of overweight and obesity:

- Improved nutrition
- Increased physical activity
- Reduced screen time
- Increased initiation, duration and exclusivity of breastfeeding

Nutrition

Importance

Healthy eating behaviors are critical to achieving and maintaining a healthy weight and to achieving optimal health and wellness. A good diet is one that supplies sufficient calories each day to maintain a healthy weight and an adequate intake of key nutrients. This number depends on gender, height, weight, metabolism and physical activity level. Individuals could use up their entire daily caloric allowance or needs on a few high-calorie foods; but if they do this, they will not get the full range of vitamins and nutrients their bodies need to be healthy. A diet that provides energy from a wide variety of food sources without extra calories will enhance the health of most individuals. Healthy eating behaviors also lower an individual's risk of many chronic diseases, including heart disease, stroke, diabetes, some types of cancer, and osteoporosis.

National Recommendations

The original Food Guide Pyramid, released in 1992, was updated and revised in 2005 (http://mypyramid.gov/). The revision has paralleled and been coordinated with the development of the *2005 Dietary Guidelines for Americans*, released by USDA and the U.S. Department of Health and Human Services (HHS).

The *2005 Dietary Guidelines for Americans* provide science-based advice to promote health and to reduce the risk of major chronic diseases through diet and physical activity. Taken together, they encourage most Americans to eat fewer calories, be more physically active, and make wiser food choices.

Key Recommendations from the Dietary Guidelines

- Meet recommended intakes within energy needs by adopting a balanced eating pattern.
- Consume a variety of nutrient-dense foods and beverages within and among the basic food groups while choosing foods that limit the intake of saturated and *trans* fats, cholesterol, added sugars, salt, and alcohol.
- Consume a sufficient amount of fruits and vegetables while staying within energy needs. Two cups of fruit and 2 ½ cups of vegetables per day are recommended for a reference 2,000-calorie intake, with higher or lower amounts depending on the calorie level.
- Choose a variety of fruits and vegetables each day. In particular, select from all five vegetable subgroups (dark green, orange, legumes, starchy vegetables, and other vegetables) several times a week.
- Consume 3 or more ounce-equivalents of whole-grain products per day, with the rest of the recommended grains coming from enriched or whole-grain products. In general, at least half the grains should come from whole grains.
- Consume 3 cups per day of fat-free or low-fat milk or equivalent milk products.

- Consume less than 10 percent of calories from saturated fatty acids and less than 300 mg/day of cholesterol, and keep *trans* fatty acid consumption as low as possible.
- Keep total fat intake between 20 to 35 percent of calories, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts, and vegetable oils.
- When selecting and preparing meat, poultry, dry beans, and milk or milk products, make choices that are lean, low-fat, or fat-free.
- Limit intake of fats and oils high in saturated and/or *trans* fatty acids, and choose products low in such fats and oils.

Relationship to Obesity

An excessive intake of calories contributes to energy imbalance and the energy density of the foods people choose to eat affects the number of calories consumed.

Energy Density

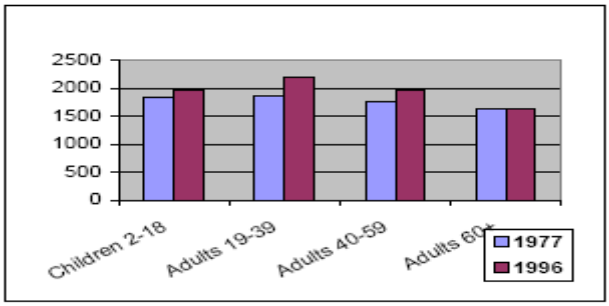
A food's **energy density,** the amount of energy per unit of food weight (calories per gram), is determined by its water, fiber and fat content. The higher the water and fiber content of a food, the lower the energy density. The higher the fat content of a food, the higher its energy density. Fruits and vegetables are very low in energy density, because they are low in fat and high in water content. In addition, fruits and vegetables are high in vitamins, minerals, fiber and cancer-fighting compounds known as "phytochemicals". Fast food and high-fat snack and convenience foods are very high in energy density. Eating too many energy dense foods and too few healthful foods low in energy density results in excessive calorie intake.

Over the past thirty years, Americans have increased their consumption of energy dense, nutrient-poor foods and beverages such as fast food, sugar sweetened beverages and high-fat snack and convenience foods, and have continued to consume inadequate amounts of healthful foods that are low in energy density, such as fruits and vegetables. These food consumption trends and choices have resulted in an excessive caloric intake and poor nutritional status.

Excessive Calories

Americans are consuming an excessive number of calories, more than they are expending in physical activity, which contributes to the energy imbalance that is the underlying cause of overweight and obesity.

Figure X. Average daily caloric intake, United States, 1977 and 1996



Source: National Food Consumption Survey (1977-1978);
Continuing Surveys of Food Intake by Individuals (1994-1996)

Between 1977 and 1996, Americans of all age groups increased the number of calories they consumed (**Figure X**). Rhode Islanders also consume too many calories, too many high-fat, high-sugar, energy dense foods and beverages, and too few nutrient-rich foods that are low in energy density, which results in excessive calorie intake and energy imbalance. To restore energy balance, the calories consumed need to be reduced and energy-dense foods and beverages need to be replaced with healthier foods that are lower in energy density.

Contributing Factors and Barriers

There are many factors contributing to the increased intake of energy dense foods and beverages and the inadequate intake of fruits and vegetables. These factors include societal changes that increased demand for convenient fast food and meals; more away-from-home food; more convenience and snack foods; larger portion sizes; increased marketing of unhealthy foods and beverages; unhealthy nutrition environments. Individual level factors are at play as well and include limited financial resources, knowledge, skills, awareness, motivation and confidence; and inconsistent and confusing messages around weight, nutrition and physical activity.

Intermediate Nutrition Objectives

Objective 1: Improve the nutritional quality of diets and decrease excessive caloric intake.

The following three nutritional behavior changes hold the greatest promise for helping Rhode Islanders reduce excessive caloric intake and improve the nutritional quality of their diets:

A. Increased consumption of fruits and vegetables
B. Decreased consumption of sugar-sweetened beverages among school-aged children
C. Decreased consumption of fast food

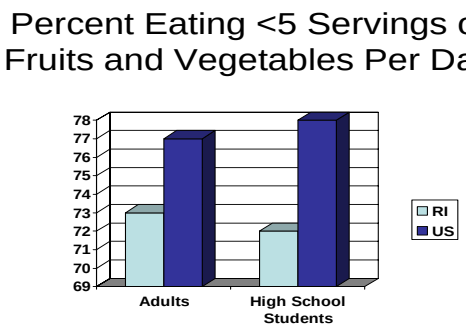
A. Increased Consumption of Fruits and Vegetables

Rationale

A growing body of research has demonstrated that fruits and vegetables are critical to promoting good health and should be the foundation of a healthy diet. Fruits and vegetables are packed with essential vitamins, minerals, fiber, and disease-fighting phytochemicals. Busy lives require food that's nutritious, energizing, and easy to eat on-the-go. Fruits and vegetables are a natural source of energy and give the body many of the nutrients it needs to keep going. Research has also shown that eating plenty of fruits and vegetables each day can help reduce the risk of heart disease, high blood pressure, type 2 diabetes and certain forms of cancer.

The Problem: Not Enough Fruits and Vegetables

Very few people report that they eat five or more servings of fruits and vegetables each day. In 2003, 77% of U.S. and 73% of Rhode Island adults and 78% of U.S and 72% of Rhode Island high school students reported that they ate less than the five recommended servings of fruits and vegetables per day.



Even very young children are not meeting recommended dietary guidelines for fruits and vegetables. A national survey found that up to a third of children ages 7 to 24 months ate no vegetables or fruits on the previous day and three to five year old children did not even come close to meeting recommended guidelines. For 15- to 18-month-olds, the vegetable most commonly eaten was French fries, with more than 25% of 19- to 24-month-olds eating French fries or fried potatoes on any given day.

Disparities in Fruit and Vegetable Consumption in Rhode Island

There are disparities in fruit and vegetable intake in Rhode Island. Men are less likely to eat five fruits and vegetables a day (25%) compared to women (32%). People who have less education are less likely to eat five fruits and vegetables a day compared to those with higher education. Rhode Islanders who are older are more likely to eat five or more fruits and vegetables per day than younger Rhode Islanders, and those with more education (32% for college educated) are more likely to eat five or more servings of fruits and vegetables per day than those with less than a high school education (24%). However, people with different levels of income, or of different racial and ethnic backgrounds, do not differ from one another in fruit and vegetable consumption.

For children, 25% of elementary and middle school students, and 30% of high school students, report not eating any fruits or vegetables on the previous day, which is far from the goal of at least five servings per day. Only 25% of high school students reported eating five or more servings of fruits and vegetables per day in the previous week. Eating less than the recommended number of fruits and vegetables was also reported by a larger proportion of children who receive free- or reduced-price lunches (low-income qualified).

Relationship to Obesity

Because they're low in calories and high in fiber, fruits and vegetables can help control weight. Replacing foods of high energy density with low energy-dense fruits and vegetables will increase feelings of satiety (fullness) and, therefore, decrease the total number of calories consumed. Fruits and vegetables need to replace high energy dense foods, not simply be added on to an individual's diet. For example, snacks such as chips and cookies should be replaced with a whole apple or mini carrots, or a turkey sandwich should have less turkey and more lettuce, tomato, and other vegetables added.

Recommendations and Evidence Base

Increases in fruits and vegetables intake are recommended by the Centers for Disease Control, the National Cancer Institute, the American Dietetic Association, the Institute of Medicine, and the *2005 Dietary Guidelines for Americans*. The *2005 Dietary Guidelines for Americans* recommend consuming a colorful variety of fruits and vegetables and encourage daily consumption of 2 ½ to 6 ½ cups, or 5 to 13 servings, (up from 5 to 9 servings), of fruits and

vegetables per day. In order to meet this recommendation, most Americans need to triple their current intake.

When people eat more fruits and vegetables, they feel full faster and consume fewer calories. Also, higher body weights are associated with lower fruit and vegetable intakes and lower body weights are associated with higher fruit and vegetable intakes.

Objective 1a: By 2010, __% of adults, __% of adolescents and children will eat five or more servings of fruits and vegetables per day.

Baseline Data:
Adults: Behavioral Risk Factor Surveillance System (BRFSS)
Adolescents: Rhode Island Health Interview Survey (HIS)

B. Decreased Consumption of Sugar-Sweetened Beverages

Rationale

Soft drinks provide very large amounts of refined sugars and calories to a nation of people already not meeting the Dietary Guidelines and experiencing an epidemic of obesity. In addition, in children and adolescents, soft drinks are replacing milk, placing children today at increased risk of developing osteoporosis. Sugar-sweetened beverages place children at increased risk of developing dental caries. Reducing sugar-sweetened beverage consumption will help achieve energy balance by decreasing the total number of calories consumed and will improve the overall health of children and adolescents.

The Problem: Too Many Sugar-Sweetened Beverages

Americans consume too much sugar, adding an excessive amount of nutrient-poor, empty calories to their daily diets. For the U.S. population as a whole, added sugars or sweeteners account for 16% of total daily caloric intake. Most of this sugar comes from sugary snack foods, drinks, and desserts, as well as hidden sugars used in food preparation. For preschoolers, excess sugar consumption is due to both added sugars and excess juice consumption, both of which increased between 1977 and 1998.

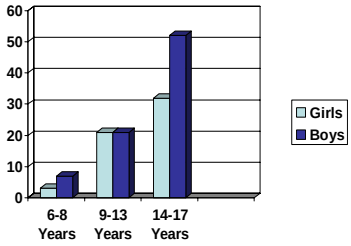
Carbonated soft drinks are now the number one source of added sugars in the American diet and account for 33% of total daily sugars. When noncarbonated soft drinks (fruit drinks, ice teas, etc.) are added in, soft drinks account for 43% of total daily sugars.

American consumption of soft drinks exploded over the last three decades, increasing by 300% between 1977 and 1998 (when it peaked at 56 gallons per person) and then, in an historic turnaround, dropped by 7% in 2004 (**Figure X**), a decline resulting from some people switching to diet sodas. In Rhode Island, 63% of households report having sugar-sweetened soft drinks in their homes.

Children start drinking soft drinks at a young age and their consumption increases through young adulthood. Twenty percent of one- and two-year-old toddlers consume soft drinks and they drink an average of seven ounces per day. Almost half of all children between the ages of 6 and 11

drink soft drinks, with the average child consuming 15 ounces per day. A large percentage of children consume three or more soft drinks per day.

Percent of Children Drinking 3 or More
8-oz Sodas Per Day



Source: Liquid Candy [USDA Economic Research Service (1947-87);
Beverage Digest (1997-2004)]

Disparities in Sugar-Sweetened Beverages

Having soda available at home is not significantly different by weight status, but the same groups that report higher fast food consumption (i.e., males, Hispanic and non-Hispanic Blacks, individuals with lower education and/or income,) also report having soda at home.

Relationship to Obesity

Recently, researchers have confirmed that soft drinks contribute to the development of obesity and, that each additional soft drink consumed increases a child's risk of becoming overweight by 60%.

There are two proposed theories to explain why this happens. The first is that sugar-sweetened beverages cause obesity because of their substantial contribution to caloric intake. The second theory is that sugar, consumed in the form of liquid, such as soda or alcohol, is more likely to result in weight gain because of the way it is metabolized. Regardless of these theories, one thing is certain: for children and adolescents, sugar-sweetened beverages are a big part of the problem.

Recommendations and Evidence Base

Decreases in consumption of sugar-sweetened beverages for children and adolescents are recommended by the Institutes of Medicine, the American Academy of Pediatrics, the American Medical Association's Council on Foods and Nutrition, the American Dietetic Association, the Centers for Disease Control, and the *2005 Dietary Guidelines for Americans*.

Recent studies "…provide strong, scientifically sound evidence that excess calories from soft drinks are directly contributing to the epidemics of obesity and type 2 diabetes and that "…reducing sugar-sweetened beverage consumption may be the best single opportunity to curb the obesity epidemic." Several intervention studies have shown that decreasing consumption of sugar-sweetened beverages does, in fact, result in weight loss; however, more long-term, controlled, population-based studies are needed.

Children and adolescents have been chosen as target groups because their consumption of sugar-sweetened beverages has skyrocketed over the past few decades, comprising too large a proportion of their total daily calories, replacing milk and other healthful beverages, and increasing their risk of premature development of chronic diseases and other health problems.

Objective 1b: By 2010, decrease the average daily consumption of sugar-sweetened beverages among adolescents to one or fewer servings per day.

Baseline Data:

Data source to be determined

Target Groups:

School-aged children and adolescents

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C. Decreased Consumption of Fast Food

Rationale

Americans consume excessive amounts of fat, especially from fast food and high-fat convenience and snack foods. Reducing fat intake will lower the energy density of diets and, therefore decrease the total number of calories consumed.

The Problem: Excessive Fat Intake

Americans of all age groups exceed recommended daily total fat intakes. Fast food consumption has increased in recent years, accounting for much of the excessive intake.

Fast Food

Fast food consumption quadrupled for adults in the past three decades and quintupled for children. In the last 20 years, the percentage of total calories from fast-food increased from 3% to 12%. U.S. spending on fast food increased dramatically from $6 billion to $110 billion over the last 30 years. Fast foods now provide between 15% and 23% of total calories consumed by adults, 18 to 39 years of age, (the group with the highest intake among Americans), 12% of total calories for adults, 40 to 49 years of age, and 10% of total calories for children. In Rhode Island, 29% of families report eating at fast food restaurants once a week and 21% report eating at fast food restaurants more than once a week.

Disparities in Fast Food Consumption in Rhode Island

Eating fast food more than once a week is more frequently reported by men than women, Rhode Islanders with lower education and income, as well as by Hispanic and non-Hispanic Black Rhode Islanders compared with non-Hispanic White Rhode Islanders. More obese Rhode Islanders (28%) report eating fast food more than once a week than those who are overweight (21%) and normal weight (18%).

Relationship to Obesity

Higher body mass index (BMI) and weight gain are associated with fast food consumption. When people eat fast food, they consume more calories, fat, carbohydrates, added sugars and sugar-sweetened beverages, and less fiber, milk, fruits and non-starchy vegetables. During a 15-year study, adults who ate fast food more than twice a week gained 10 pounds more than those who ate fast food less than once a week and their insulin resistance increased twice as fast.

Recommendations and Evidence Base

Decreases in fat consumption, especially the consumption of fast food and high-fat convenience and snack foods are recommended for Americans by the National Heart, Lung and Blood Institute (NHLBI), the American Cancer Society, the American Academy of Pediatrics, the Institute of Medicine and the *2005 Dietary Guidelines for Americans*.

The *2005 Dietary Guidelines for Americans* recommend a total fat intake that is between 20% and 35% of total daily calories for adults and between 25% and 35% of total daily calories for children and adolescents, ages 4 to 18, and children, ages 2 to 3. The guidelines also recommend that no more than 10% of calories come from saturated fat and that the consumption of *trans* fats, found in most processed foods, fried foods and fast foods be kept to a minimum. A review of the results from 28 clinical trials confirmed that reducing fat consumption will, in fact, result in decreased caloric intake and eventual weight loss.

Fast food consumption is associated with intake of excess calories usually in the form of fat. For this reason, we have chosen to attempt to decrease fat intake by focusing our efforts on decreasing fast food consumption among high-risk populations.

Objective 1c: By 2010, decrease to __% the proportion of families that report eating at a fast food restaurant once per week or more.

Baseline

Rhode Island Health Interview Survey

Target Groups

Low-income, lower-educated racial and ethnic minorities, men, children of all ages.

A. Societal Changes

Over the last four decades, there have been dramatic changes in the way families live their lives that have contributed to the obesity crisis. Women's participation in the workforce increased from 36% in 1960 to 58% in 2000. This increase, together with economic necessity, resulted in more families with both parents working outside of the home and less time for parents, guardians or caregivers to prepare home-cooked meals. Americans searched for quicker, more convenient ways of feeding their families and found them in convenience foods, snack foods, away-from-home food and fast food.

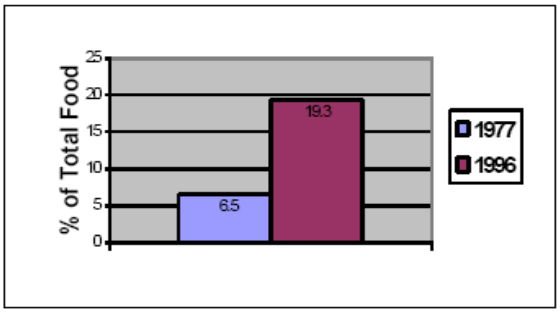
B. More Away-From-Home Foods

Since time for cooking is scarce and there are inexpensive, affordable ways to eat on the run, Americans now eat significantly more food away-from-home, a trend that is expected to

continue. In 1970, Americans spent one-third of their food dollars on food away from home; this amount grew to 39% in 1980, 45% in 1990, and 47% in 2001. Over the past two decades, meals and snacks eaten away from home increased by more than 75%, from 16% of all meals and snacks in 1977-78 to 27% in 1995. Fast foods were by far the most common source of meals away from home, accounting for 43% of all meals away from home. During the same period of time, the number of fast food restaurants more than doubled. Away-from-home foods are higher in fat, saturated fat and calories than food eaten at home. Fast food, the most common source of meals away from home, accounts for 43% of all meals eaten away from home.

Meals eaten away-from-home provide very few fruits and vegetables, with the average meal providing less than half a serving of fruit and just over one serving of vegetables. At nearly one-half of the restaurant chains surveyed in a recent study, French fries were the only vegetable side dish on children's menus. Limited information about the nutritional (calorie and fat) content of meals away from home makes it easy for people to consume an excessive number of calories and fat, without realizing they are doing so.

Figure 8. Percent of food consumed by children in restaurants & fast food outlets



Source: National Food Consumption Survey (1977-1978); Continuing Surveys of Food Intake by Individuals (1994-1996)

C. More Convenience and Snack Foods

The new demand for quick and easy-to-prepare food was met by the food industry with an ever increasing variety of prepackaged convenience foods. Over the last 30 years, production, purchase and consumption of these foods and snacks increased dramatically. Snack food (e.g., cookies, chips, crackers and popcorn) consumption roughly tripled over the last three decades. Almost one-quarter of children's and adolescent's daily calories come from these energy-dense snack foods.

D. Larger Portion Sizes

Portion sizes of packaged foods and serving sizes of restaurant food are much larger than in the past, with some of the largest offerings being more than five times their original size. Super sizing and value marketing have only made matters worse. For small increases in price, people can purchase larger portions and, as a result, end up consuming substantially more calories and saturated fat.

E. Unhealthy Nutrition Environments

The lack of access to affordable, healthful foods and beverages and increased access to unhealthful foods and beverages in schools, communities, worksites and child care settings has also contributed to the poor nutritional quality of diets in this country.

School Nutrition Environments

Children's dietary behaviors are influenced by the types of foods and beverages available to them on the school campus, both before, during and after school. Most schools still make high-calorie, low-nutrient "competitive" foods and beverages available to students outside of the school meal programs. In both middle and high schools, 75% of beverage options and 85% of snacks are of poor nutritional quality. The most prevalent options are soda, imitation fruit drinks, candy, chips, cookies, and snack cakes. Competitive foods are served or sold in a variety of school settings, including a la carte lines, snack bars, vending machines, school stores, school fundraisers (e.g., candy), bake sales, classroom parties and fundraisers. The ready availability of these foods does not support students' ability to make healthy food choices and conflicts with what they are being taught in class. Nearly 98% of U.S. high schools, 74% of middle schools and 43% of elementary schools have vending machines or school stores selling foods of low nutritional value.

Schools not only sell non-nutritious foods and beverages; they also promote their consumption through vending machines, soft drink "pouring rights" agreements, branded fast food, fundraisers, direct advertising, (e.g., food and beverage ads in schools) and indirect advertising, (e.g., corporate-sponsored educational programs, sports sponsorships, contests and coupons, and advertisements on Channel 1).

School meal programs serve high-fat meals to students too often and do not provide students with adequate time to eat lunch (at least 20 minutes after being seated) and breakfast (at least 10 minutes after being seated). In many schools, there is limited availability of fruits and vegetables in meal programs, after-school programs and as snack alternatives during the day.

Community Nutrition Environments

Limited access to healthful foods, such as fruits and vegetables, in low-income communities makes it difficult for residents to make healthy food choices. Likewise, increased access to energy dense, fast food and high-fat snack and convenience foods encourages and results in over-consumption of these unhealthful foods. Over the past few decades, the availability and affordability of energy dense foods in low-income and racially and ethnically diverse neighborhoods has increased and access to affordable healthful foods has decreased. This access problem in low-income neighborhoods is due to supermarket relocation to the suburbs, a lack of transportation to supermarkets offering a variety of healthy choices at affordable prices, the growth of convenience stores that offer limited selections of healthful foods at higher prices, and the presence of a proportionately greater number of fast food restaurants in low-income communities.

Worksite Nutrition Environments

Since most people spend a large portion of their day at work, lack of access to healthful foods and beverages at the worksite has a significant impact on overall dietary intake. For many employees, it is nearly impossible to avoid unhealthy eating at work, where there are vending

machines stocked with energy-dense, high-calorie foods, few healthful options on the cafeteria menus, and where the closest lunch venue may be a fast food restaurant.

Child Care Nutrition Environments

Obesity rates in preschool children have more than doubled over the past three decades and poor nutrition is clearly a contributing factor. Since so many children under the age of five spend the majority of their day in child care, the nutritional quality of foods and beverages served in child care centers has a significant impact on children's dietary status. Food habits acquired in childhood tracks into later childhood and adulthood. Unfortunately, few uniform standards currently apply to nutrition in child care centers. Weak state standards governing nutrition in child care represent a missed opportunity to prevent overweight and obesity.

Evaluations of menus and meals served in child care centers and family child care homes show that the combinations and quantities of food prepared for children often fail to supply the recommended share of calories and key nutrients such as iron, zinc, calcium and magnesium. In addition, there is growing evidence that deficiencies of these nutrients are linked to long-term delay in brain maturation as well as attention span, intelligence scores, behavior problems, reduced peak bone mass, and risk of depressed immunity.

F. Aggressive Marketing of Junk Food to Children

Another trend contributing to the obesity crisis is the aggressive marketing of unhealthful foods and beverages to children. Children are now the target of intense and aggressive food marketing and advertising efforts with food and beverage advertisers collectively spending $10 to $12 billion annually to reach children. Multiple techniques and channels are used to reach youth, beginning when they are toddlers, to foster brand loyalty and encourage product use. These food marketing channels include television advertising, in-school marketing, product placements, kids clubs, the Internet, toys and products with brand logos, and youth-targeted promotions, such as cross-selling and tie-ins. Young children have few defenses against such ads, and older children and teens can be manipulated and misled by them.

A recent joint report by the Food and Agriculture Organization (FAO) and World Health Organization (WHO) confirmed that the evidence is strong enough to suggest a probable causal relationship between the heavy marketing of fast food outlets and energy-dense, micronutrient-poor foods and beverages to children and an increased risk of obesity. Marketing of junk food to children results in increased caloric intake, thereby contributing to the problem of childhood obesity. As the American Academy of Pediatrics so aptly stated ..."advertising directed toward children is inherently deceptive and exploits children under eight years of age" because they do not understand the difference between the information and advertising. Older children will hopefully be savvier in media literacy and better able to withstand these efforts.

G. Lack of Nutrition Education and Behavior Change Programs

Behavioral theories suggest that in order to change dietary behaviors, individuals need to acquire the knowledge, skills and attitudes and also have confidence in their ability to make the desired behavior change. In Rhode Island, there are not enough culturally and linguistically appropriate nutrition education and behavior change programs available to help individuals change their eating behaviors. Evidence-based, culturally and linguistically appropriate nutrition education

and behavior change programs are needed in a variety of settings, such as schools, communities, child care centers, worksites and health care facilities, to help individuals acquire these critical skills.

H. Inconsistent and Confusing Messages

Inconsistent and confusing messages regarding achieving and maintaining a healthy weight and nutrition recommendations make it difficult for families and children to adopt and implement healthy eating behaviors. There is a need for the development and dissemination of clear and consistent messages across all settings—health care, child care providers, schools, communities, worksites and the media—to ensure that individuals and families are clear about the changes they need to make in order to adopt lifelong healthy eating behaviors.

Breastfeeding

Importance of Breastfeeding

Breastfeeding provides important benefits for children, mothers and society. For children, breastfeeding supports optimal development and protects against acute and chronic illness. For mothers, breastfeeding helps with recovery from pregnancy and childbirth and provides lifelong health advantages. For society, breastfeeding provides a range of economic and environmental rewards.

Benefits for Children

Breastfeeding offers advantages for children that cannot be duplicated by any other form of feeding. Compared with formula-fed children, those who are breastfed are healthier and have fewer symptoms and shorter illnesses when they do get sick. Breastfed children score higher on cognitive and IQ tests at school age, and also on tests of visual acuity; have a lower incidence of sudden infant death syndrome (SIDS); are less likely to suffer from infectious illnesses and their symptoms (e.g., diarrhea, ear infections, respiratory tract infections, meningitis); have a lower risk of the two most common inflammatory bowel diseases (Crohn's disease, ulcerative colitis); suffer less often from some forms of cancer (e.g., Hodgkin's disease) have a lower risk of juvenile onset diabetes, if they have a family history of the disease and are breastfed exclusively for at least 4 months; are significantly protected against asthma and eczema, if at risk of allergic disorders and exclusively breastfed for at least 4 months; may have a lower risk of obesity in childhood and in adolescence; have fewer cavities and are less likely to require braces.

Breastfeeding provides benefits not just for full-term infants but also for premature and low birth weight infants. Compared with premature infants who receive human milk, those who receive formula have future IQs that are 8 to 15 points lower. For premature infants, human milk significantly shortens length of hospital stay; reduces hospital costs; hastens brainstem maturation; reduces the risk of life-threatening diseases of the gastrointestinal system and other infectious diseases.

Benefits for Mothers

Breastfeeding offers a range of benefits for mothers as well as their children. Women who have breastfed are less likely to develop ovarian and premenopausal breast cancers. The more months a woman has spent breastfeeding, the greater the beneficial effect. Breastfeeding also reduces the risk of hip fractures and osteoporosis. Breastfeeding mothers enjoy a quicker recovery after childbirth and a reduced risk of postpartum bleeding. Mothers who breastfeed are more likely to return to their prepregnancy weight than are mothers who formula feed. Exclusive breastfeeding for the first six months postpartum, in the absence of menses, is 98% effective in preventing pregnancy. Breastfeeding mothers are reported to be more confident and less anxious than bottle-feeding mothers. Finally, breastfeeding provides psychological benefits for both the mother and infant by contributing to feelings of attachment between a mother and her child.

Community and Economic Benefits

Breastfeeding provides economic benefits for society, families and employers. These benefits include the potential for decreased annual health care costs of $3.6 billion in the United States; decreased costs for public health programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); decreased parental employee absenteeism and the associated loss of family income; more time for attention to siblings and other family matters as a result of decreased infant illness; decreased environmental burden for disposal of formula cans and bottles; and decreased energy demands for production and transport of artificial feeding products. Finally, employers who provide breastfeeding support services at the worksite save $3 for every $1 invested in breastfeeding support. Cigna Corporation's Corporate Lactation Program yielded the following annual savings: a quarter of a million dollars in health care expenses; nearly two-thirds fewer prescriptions and $60,000 savings from reduced absenteeism.

Relationship to Obesity

There is a growing body of evidence that breastfeeding also offers protection against obesity and that the longer a mother breastfeeds her infant, the greater the protection (**Table X**)

Dose Response	Risk of Obesity
Never breastfed	4.5%
Average breastfed	2.8%
2 months breastfed	3.8%
3-5 months breastfed	2.3%
6-12 months breastfed	1.7%
>12 months breastfed	0.8%

Source: [Von Kries et al. *BMJ* 319:147, 1999]

In a recent review of the literature on the relationship between breastfeeding and childhood obesity, a majority of the studies showed a lower risk of overweight in children who had been breastfed. The three studies that did not show a protective effect had not included information about exclusive breastfeeding. After six months of age, breastfed infants were leaner than infants who were not breastfed (of women who chose not to breastfeed). Several studies also demonstrated a dose response reduction in the risk of obesity (i.e., the longer an infant was breastfed, especially exclusively breastfeed, the greater the protection).

National Recommendations

Breastfeeding is universally endorsed by the world's health and scientific organizations as the best way of feeding infants. In its most recent policy statement, the American Academy of Pediatrics strengthened its previous recommendations and now recommends exclusive breastfeeding for the first six months of life, continued breastfeeding while adding weaning foods for the next six months, and continued breastfeeding for as long as mother and child wish.

Exclusive breastfeeding is defined as an infant's consumption of human milk with no supplementation of any type (no water, no juice, no non human milk, and no foods) except for vitamins, minerals, and medications. Exclusive breastfeeding has been shown to provide improved protection against many diseases and to increase the likelihood of continued breastfeeding for at least the first year of life.

The Problem: Low Breastfeeding Initiation, Duration and Exclusivity Rates

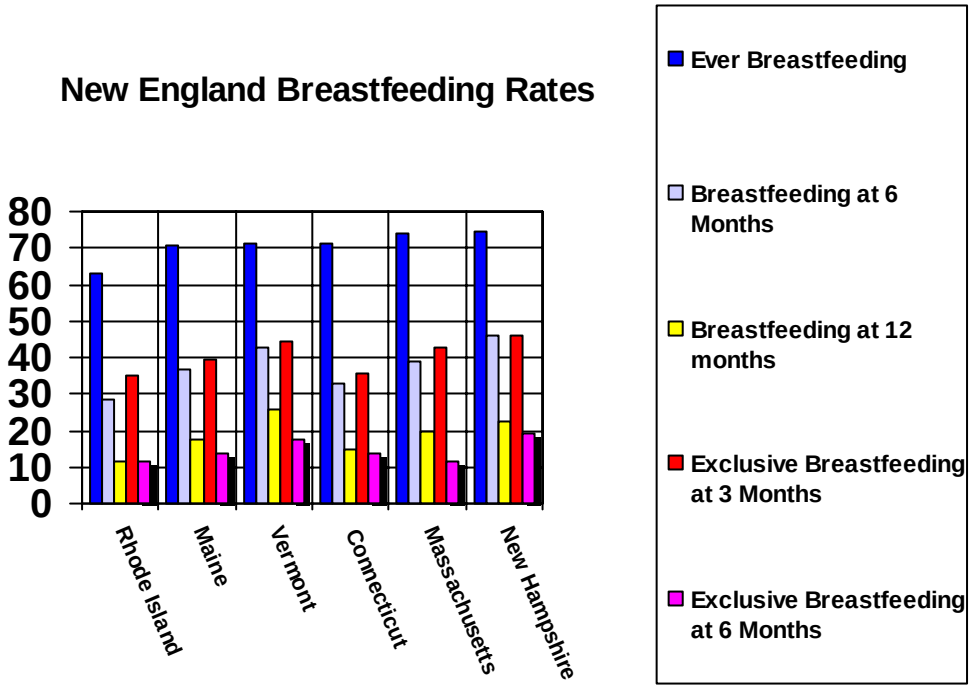
Despite the well-recognized benefits of breastfeeding, breastfeeding rates are well below the Healthy People 2010 recommendations and especially low for exclusive breastfeeding. In 2004, 70% of U.S. mothers reported ever breastfeeding their infants, 36% reported still breastfeeding at six months, and 18% reported breastfeeding at 12 months. The situation is even worse in Rhode Island where 63% reported ever breastfeeding their infants, 28% reported still breastfeeding at six months, and 12% reported still breastfeeding at twelve months.

Rhode Island Breastfeeding Rates Compared to the U.S. National Rate and Healthy People 2010 Targets

	Ever Breastfeeding	Breastfeeding at 6 months	Breastfeeding at 12 months	Exclusive Breastfeeding at 3 months	Exclusive Breastfeeding at 6 months
Rhode Island	63.2%	28.3%	11.5%	35.2%	11.5%
US National	70.3%	36.2%	17.8%	38.5%	14.1%
Healthy People 2010 Target	75%	50%	25%	N/A	N/A

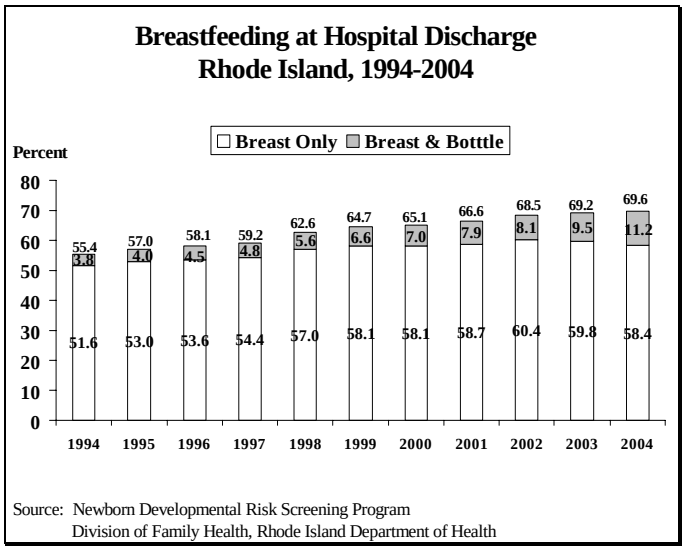
Source: 2004 National Immunization Survey, Centers for Disease Control and Prevention, Department of Health and Human Services

Rhode Island also has the lowest breastfeeding rates in New England, which may help explain the extremely high prevalence of obesity in Rhode Island's preschool WIC population.



Source: 2004 National Immunization Survey, Centers for Disease Control and Prevention, Department of Health and Human Services

Although breastfeeding initiation rates have steadily increased nationally and in Rhode Island since 1990, exclusive breastfeeding initiation rates have shown little or no increase over that same period of time. Similarly, six months after birth, the proportion of infants who are exclusively breastfed has increased at a much slower rate than that of infants who receive mixed feedings. No U.S. state achieved an exclusive breastfeeding rate of 25% or greater through six months of age.



Breastfeeding Disparities

Nationally, mothers who are younger, have lower income or lower education, are unmarried or are participating in WIC are at higher risk of not breastfeeding, and non-Hispanic Black women are much less likely to initiate breastfeeding (54%) compared with non-Hispanic White (74%) or Hispanic women (79%).

In Rhode Island, however, non-Hispanic Black women report initiating breastfeeding (68%) at about the same proportion as non-Hispanic White women (67%). Women, who are non-Hispanic overall (64%), regardless of race, are less likely to breastfeed than Hispanic women (82%).

When asked separately about exclusive breastfeeding and feeding a combination of breast milk and formula, the picture becomes clearer. Over 60% of non-Hispanic White women report exclusive breastfeeding compared to 47% of Black women and 50% of Hispanic women. Only 4% of non-Hispanic White women report a combination of breast milk and formula compared to 15% of non-Hispanic Black and 26% of Hispanic women. Therefore, Rhode Island women demonstrate a similar disparity picture to the U.S. as a whole with regard to exclusive breastfeeding, but the racial disparity found throughout the U.S. with regard to any breastfeeding initiation is not seen in Rhode Island. (**Figure X**)

Contributing Factors and Barriers

Obstacles to initiation and continuation of breastfeeding include outdated hospital policies and practices; lack of professional support; lack of peer support; maternal employment; high cost of breast pumps; inadequate insurance coverage; unsupportive work and child care environments;

insufficient prenatal education about breastfeeding; lack of family and broad societal support; commercial promotion of infant formula; and lack of guidance and encouragement from health care professionals.

A. Outdated Hospital Policies and Practices

Some hospitals still employ outdated maternity care practices which negatively affect breastfeeding outcomes. Research has shown that experiences with breastfeeding in the first hours and days of life significantly influence an infant's later feeding. Since the maternity care experience exerts unique influence on both breastfeeding initiation and later infant feeding behavior, there is a need for all hospitals in Rhode Island to adopt evidence-based breastfeeding policies and practices. Breastfeeding is an extremely time-sensitive relationship and must be supported throughout the maternity hospital stay, not postponed until the infant goes home.

B. Lack of Training for and Guidance from Health Care Providers

Health care providers have a substantial influence on a woman's decision to breastfeed and on her ability and desire to continue breastfeeding, yet some clinicians lack the skills and/or confidence to provide breastfeeding counseling and support. Moreover, some believe that breastfeeding provides only modest benefits and that infant formula is not a significantly inferior choice. Education to improve the knowledge, attitudes and skills of health care providers is a key strategy for improving breastfeeding rates.

All health care providers who interact with women of reproductive age or with children require a basic understanding of breastfeeding. In addition, they need to understand how the procedures they perform or the drugs they prescribe may directly or indirectly affect women who breastfeed currently or may do so in the future. Professionals need to recognize that breastfeeding is a normal and biologically important process that is critical to maternal and infant health. Professionals working in maternity care require in-depth knowledge and skills directly related to breastfeeding and lactation management.

Ideally, education on breastfeeding would be included in the curricula of medical and nursing schools and educational programs for other health professionals, as well as into the residency and fellowship training of physicians. In addition, minimum competency-based standards of breastfeeding care would be established. Because many of today's health professionals did not receive adequate training in breastfeeding, in-service training or retraining of current practitioners is needed. This could be accomplished by integrating breastfeeding training into health professional school curricula, requiring that it be included in continuing education requirements, and included breastfeeding counseling in quality assurance review criteria.

C. Lack of Professional Support

Lack of support from professionals has been identified as a major barrier to breastfeeding, especially among Black or African American women. Most new mothers do not have direct, personal knowledge of breastfeeding and many cannot rely on family members for consistent, accurate information and guidance about infant feeding. Although many women have a general understanding of the benefits of breastfeeding, they may lack exposure to sources of information regarding how breastfeeding is actually carried out and how to deal with problems that arise.

Mothers often identify support received from health care providers as the single most important intervention the health care system could have offered them to help them breastfeed

If trained, many different Rhode Island health care providers who come in contact with pregnant and postpartum women could provide evidence-based breastfeeding support. Hospital nurses provide breastfeeding support during the critical first days after birth. WIC nutritionists provide prenatal and postpartum nutrition counseling for many low-income women in Rhode Island. Visiting nurses visit mothers with special problems in their homes after they leave the hospital, and pharmacists counsel breastfeeding mothers when they have questions regarding medication they may be taking and potential effects on their baby's health. All of these health care providers would benefit from ongoing training in evidence-based breastfeeding counseling and support. In addition to training, health care providers need access to current and accurate information regarding issues that may pose barriers to continued breastfeeding (e.g., medication and mother's milk supply)..

D. Lack of Peer Support (Mother-to-Mother) in Communities

Many women do not have access to peer support programs in their communities. Because women's social networks are highly influential in their decision making processes, they can be either barriers or point of encouragement for breastfeeding. New mothers' preferred resource for concerns about child rearing is other mothers, and perceived social support has been found to predict success in breastfeeding. Peer support is a cost-effective, individually-tailored, and culturally competent way to promote and support breastfeeding for women of varying socioeconomic backgrounds.

E. Maternal Employment and Unsupportive Work Environments

Working outside of the home is related to a shorter duration of breastfeeding especially in situations where employers and worksite environments are not supportive. One-third of mothers return to work within three months after giving birth and two-thirds return within six months. Low-income women, among whom Black or African American and Hispanic women are overrepresented, are more likely than their higher income counterparts to return to work earlier and to be engaged in jobs that make it challenging for them to continue breastfeeding.

Barriers identified in the workplace include a lack of flexibility for milk expression in the work schedule, lack of accommodations to pump or store breast milk, concerns about support from employers and colleagues, and real or perceived low milk supply. Given the substantial presence of mothers in the work force, there is a strong need to establish lactation support in the workplace.

F. High Cost of Breast Pumps

The expense of purchasing or renting an effective breast pump discourages many low-income women from initiating breastfeeding in the hospital or continuing to breastfeed after they return to work or school. With a personal-use, double-setup electric breast pump costing between $175 and $320, buying or renting a pump outright is out of the economic reach of many low-income women, and obtaining one by other means is often extremely difficult. For women who need a breast pump, lack of access can end hopes of breastfeeding their babies. Using a breast pump is a

reality for many women, and in the Neonatal Intensive Care Unit (NICU), it is a critical health need.

Women need breast pumps for a variety of reasons. A mother with a sick or premature infant in the NICU needs a breast pump to provide milk for a baby who cannot nurse at the breast and to maintain her milk supply. Mothers who return to work rely on breast pumps to collect their milk while they are away from their baby, and to maintain their milk supply. Also, mothers may use breast pumps to bridge the gap temporarily when they are having breastfeeding problems such as latch difficulties or slow infant weight gain or weight loss. Breast pumps are especially important for low-income mothers, who often must return to work early. Many low-income mothers decide not to breastfeed or to wean early because they plan to return to work; this is especially true for women who plan to return before six weeks postpartum. The American Academy of Pediatrics recommends exclusive breastfeeding for approximately the first six months of life, with continued breastfeeding to a year or beyond. With better access to breast pumps, more low-income mothers may be able to meet this goal.

G. Inadequate Insurance Coverage

Many breastfeeding mothers in Rhode Island do not have access to adequate health insurance coverage for lactation support services and equipment, a situation which creates a significant barrier to successful breastfeeding initiation and duration. Many third-party payors do not provide reimbursement for services rendered by certified lactation consultants unless they are otherwise eligible for reimbursement as nurses, physicians, or other health professionals. When they are reimbursed, it is usually only for a specified number of visits or for specified conditions. This situation is widely believed to be a barrier for many women seeking professional support, as they must often pay out of pocket for this support. It is critical that all health insurers include lactation and breastfeeding services and supplies in their standard, reimbursable perinatal care services. Services would include the time required by pediatricians, other licensed health care providers and certified lactation consultants to assess and manage breastfeeding; and supplies would include the cost of renting a high quality breast pump and ancillary equipment.

H. Lack of Education about Breastfeeding in Schools

Currently, there is very little education about breastfeeding in the school curricula in Rhode Island. Developing the thinking skills of students is critical in creating a long-lasting public acceptance of breastfeeding. Practical, interesting examples that help students examine the advantages and disadvantages of breastfeeding need to be demonstrated in order for them to form their own positive values.

A change in social norms is needed for breastfeeding to be recognized as the normal and preferred method of infant feeding. Family members have an important influence on women's choices to breastfeed and it is important that these "influencing" family members be educated about the many benefits of breastfeeding.

I. Lack of Support for Breastfeeding in Child Care Facilities

Unfortunately, in many child care settings, mothers are unable to breastfeed their children due to a variety of factors including unsupportive or untrained staff, lack of a clean, private space to breastfeed, and lack of appropriate storage for expressed breast milk. The number of children in

child care increased more than fourfold in the past thirty years. In fact, child care is now the norm. In order to impact breastfeeding duration rates, child care facilities need to support mothers who wish to breastfeed infants in their care.

J. Commercial Promotion of Infant Formula

A Cochrane review confirmed that the commercial marketing of infant formula has a negative impact on breastfeeding. The effect of the marketing practices of commercial competitors on breastfeeding is of particular concern because of its disproportionately negative impact on mothers known to otherwise be at high-risk of early cessation of breastfeeding. These include first-time mothers, those with less formal education, racial and ethnic minority women, and ill postpartum mothers. Limiting the marketing of commercial competitors who compete with breastfeeding can help mothers and families make appropriate and informed decisions about infant feeding.

Infant formula is marketed and promoted in a variety of ways (e.g., through distribution of hospital discharge packs, coupons for free or discounted formula, along with television and general magazine advertising). The distribution of formula or vouchers in the hospital, health care facility or physician's office places the health care provider in the position of advertising or promoting a specific product and of potentially contributing to the failure of some patients to nurse their infants. Limiting the marketing of commercial competitors who compete with breastfeeding can help mothers and families make appropriate and informed decisions about infant feeding. Ideally, this would be done through enforcement of the *International Code*, which provides standard guidelines for the marketing and distribution practices of commercial competitors to breastfeeding and especially limits marketing directed toward pregnant women and new mothers.

The World Health Organization (WHO) and UNICEF, through the World Health Assembly, determined the *International Code* was necessary “in view of the vulnerability of infants in the early months of life and the risks involved in inappropriate feeding practices, including the unnecessary and improper use of breast milk substitutes.” The International Code aims to “contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding and by ensuring the proper use of breast milk substitutes, when they are necessary, on the basis of adequate information and through appropriate marketing and distribution.”

The *International Code* recommends:

- No advertising of breast milk substitutes directly to the public
- No free samples to mothers
- No promotion of products in health care facilities
- No commercial product representatives to advise mothers
- No gifts or personal samples to health workers
- No words or pictures idealizing artificial feeding, including pictures of infants on the products

In spite of the challenges associated with enforcing the code, individual health care systems, and health care providers can choose to implement policies that support the *International Code* in an effort to increase initiation, duration and exclusivity of breastfeeding.

K. Limited Public Acceptance of Breastfeeding

Many women feel uncomfortable or embarrassed breastfeeding away from home in public places and this discomfort can discourage women from breastfeeding. This is partly because many Americans have had little experience with breastfeeding in their daily lives and misconceptions related to breastfeeding still exist, in part because it remains unseen and mysterious. As breastfeeding becomes more accepted as the normal and standard infant feeding method, public acceptance should also increase.

Rhode Island has already adopted legislation ensuring a woman's right to breastfeed. Additional interventions to increase public acceptance of breastfeeding could include programs to improve acceptance in public places such as restaurants, stores and libraries, and the placement of nursing mothers' lounges in public areas.

Rhode Island Breastfeeding Objectives

The CDC has identified increasing breastfeeding rates and duration as one of the four most promising behavior change strategies for decreasing the prevalence and rate of increase in overweight and obesity.

The IHW has adopted the following Healthy Rhode Island 2010 objectives to increase the rates of breastfeeding initiation, duration and exclusive breastfeeding.

Objective 2a: By 2010, 75% of mothers will breastfeed their babies in the early postpartum period.

Baseline:

Objective 2b: By 2010, 50% of mothers will breastfeed their babies for at least six months.

Baseline:

Objective 2c: By 2010, 25% of mothers will breastfeed their babies for at least 12 months.

Baseline:

Objective 2d: By 2010, 60% of mothers will breastfeed their babies exclusively for three months.

Baseline:

Objective 2.e: By 2010, 25% of mothers will breastfeed their babies exclusively for six months.

Baseline:

Physical Activity

Importance of Physical Activity for Adults

Because physical activity burns calories and helps maintain muscle, it is an important part of weight loss and weight maintenance. Evidence shows that physically active people have lower BMIs and body fat percentages than more sedentary people. Researchers have examined the role of physical activity in weight loss and found that:

- Physical activity affects weight and body composition by promoting fat loss and preserving or increasing muscle; and

- Weight loss is related to the frequency (days a week) and duration (minutes per session) of physical activity.

In addition to physical activity's role in promoting a healthy weight, it reduces the risk of developing high blood pressure, high cholesterol, heart disease, stroke, diabetes, osteoporosis, and certain types of cancer. Physical activity also improves the symptoms of depression and anxiety, and relieves arthritis pain.

"Physical activity" is defined as any bodily movement that expends energy, or "burns calories".

Physical activity can be in the form of walking or biking for transportation, chores, hobbies, exercise, or job related duties.

Importance of Physical Activity for Youth

Physical activity is important for children's health and development. Physical activity burns calories and can prevent excessive weight gain and contribute to weight loss. Preventing weight problems is important for children, as overweight children are more likely to become overweight adults, and are at higher risk of chronic health conditions associated with obesity. In addition to weight management, regular physical helps children develop a healthy heart and lungs, strong bones and muscles, and is associated with positive self-esteem and improved academic performance.

National Recommendations

To gain these health benefits, adults should be physically active for at least 30 minutes a day, at least 5 days a week. Alternatively, adults can accumulate 20 minutes of vigorous physical activity on at least 3 days a week for health benefits. This activity can be accumulated in 10 to 15 minute bouts. To lose weight, individuals may need to burn more calories by accumulating more than 30 minutes of physical activity per day.

School-age youth should accumulate 60 minutes or more of moderate to vigorous physical activity every day through a variety of age appropriate activities. The National Association for Sport and Physical Education recommends that toddlers accumulate at least 90 minutes per day of physical activity with 30 minutes in a structured setting. Preschoolers should accumulate 120

minutes per day, with 60 minutes in a structured setting. Structured activity sessions should be 15 to 20 minutes in length and should emphasize a wide variety of movement skills.

30 minutes of moderate physical activity on five or more days a week

CDC/ACSM

Or

20 minutes of vigorous physical activity on three or more days a week

Healthy People 2010

The Problem: Not Enough Physical Activity

Physical Activity among Rhode Island Adults

While most people know the importance of physical activity, not enough people are regularly physically active. Similar to the rest of the nation, about half (49%) of Rhode Island adults do not meet the recommended minimum levels of physical activity.

Over the past 12 years, there has been no significant change in the percentage of U.S. or Rhode Island adults who report no leisure time physical activity (29 to 25%).

Physical Activity Disparities among Rhode Island Adults

Large disparities in physical activity exist among population groups. The following groups are less likely to meet the recommended minimum level of physical activity:

- Females (52% vs. 46% males)
- Adults age 65 or older (62% vs. 40 52% younger than 65)
- Hispanic adults (61% vs. 47% non-Hispanic Whites)
- Adults with the lowest incomes (68% vs. 40% with higher incomes)
- Adults with less than a high school education (66% vs. 43% college graduates)
- Adults with disabilities (65% vs. 49% people without disabilities)

In terms of leisure time physical activity, the disparities are similar. The following groups are less likely to report participating in leisure time physical activity:

- Females (28% vs. 21% males)
- Older adults
- Adults with lower education
- Adults with lower incomes
- Hispanic adults (43% vs. 22% non-Hispanic Whites and 26% non-Hispanic Blacks)

Physical Activity among Rhode Island High School Students

While the current guidelines for physical activity for children and adolescents recommend 60 minutes of activity daily, 35% of Rhode Island high school students do not get 30 minutes of activity daily.

60 minutes of moderate physical activity most days of the week, preferably daily

2005 Dietary Guidelines for Americans

Physical Activity Disparities among Rhode Island High School Students

As in adults, physical activity levels vary among population subgroups. The prevalence of insufficient physical activity is higher among:

- Females (40% vs. 29% males)
- Hispanic youth (45% vs. 33% Whites)

Barriers to Physical Activity

There are many reasons why people do not get enough physical activity. The most commonly cited are time, cost, safety, lack of facilities, and dislike of strenuous activity. Often, these reasons are linked to an environment that presents more barriers than opportunities to be physically active, making activity time consuming, costly, dangerous, inconvenient, and often unnecessary.

Some examples of how the environment discourages physical activity include:

Technological advances that make physical activity unnecessary

Americans no longer need to be physically active as part of their daily lives. Dishwashers, clothes washers, and riding lawn mowers among other labor saving advances have made routine physical activity unnecessary. The same is true outside the home. Most multi-story buildings have elevators or escalators, which are used more frequently than stairs. Stairwells are often marked with "emergency exit only" signs, are locked, or are poorly lit and maintained, further discouraging their use. The Internet lets consumers compare prices and purchase online, rather than walk around a shopping mall. Most stores have automatic doors, most homes have televisions with remote controls, and most fast food restaurants (and banks and dry cleaners ...) have drive-through windows, eliminating the simplest of physical activities. Because of these technological advances, Americans save an estimated 700 calories per week, enough to contribute a weight gain of 1 pound every five weeks or 10 pounds per year.

Busier schedules that make physical activity inconvenient

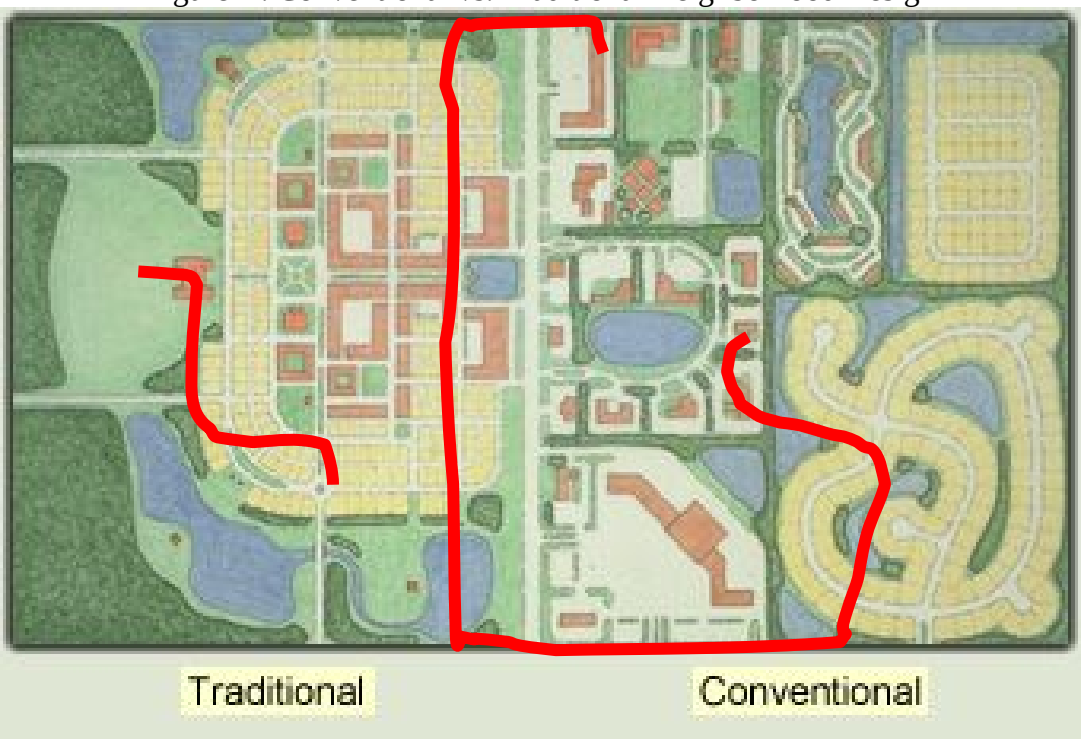
Adults are spending more time away from home. U.S. adults are now working over 49 hours a week in jobs that are largely sedentary. Not only are Americans spending more time away from home on the job, they are spending more time commuting because jobs have moved out of local communities and into cities. Increased auto dependence has contributed to workers spending more time commuting in traffic. The result is that many people have less free time to spend on physical activity.

Young people are also spending more time in structured settings than ever before. In addition to the typical seven hours a day in school, many children and adolescents spend additional time in structured after school settings, which often focus on academics and leave little time for physical activity. Increasing homework demands and organized activities, such as lessons and tutoring, have further limited children's time for unstructured physical activity. The result is that children spend the majority of their time in planned sedentary activity.

Communities that are designed for driving, not walking or biking

One quarter (1/4) of all trips are one mile or less, but three quarters (¾) are made by car because development patterns have decreased the ability to walk or bike for transportation. Between 1977 and 2001, walking trips declined while driving trips increased (**Figure X**). Forty years ago, half of children walked or biked to school, compared to only 10% today. Current development patterns are partly responsible for this trend.

Figure X. Conventional vs. Traditional Neighborhood Design



Source:

A traditional neighborhood (**Figure X**, left side) locates houses, schools, shops and offices in close proximity to one another. Pedestrians can conveniently access shops and services without crossing any wide, busy roads. In contrast, the design of conventional communities (**Figure X**, right side) locates residential, commercial and school buildings in separated areas that are connected by wide, straight main roads that allow more traffic to move at higher speeds. People who live in conventionally designed communities (as demonstrated in the lower right part of the diagram) have no choice but to drive to shops and services because distances are too far and walking conditions are too dangerous. In addition, new "mega-schools" are often built on the outskirts of town, too far away for children to walk or bike to school. Because of this type of development, many people are not able to be physically active as part of daily transportation or recreation in their own neighborhoods. In particular, U.S. children generally have less opportunities for regular physical activity, and less freedom of walking or biking to school, the library, or even a friend's house.

Childcare facilities that are not equipped for physical activity

Many preschool-aged children who are enrolled in childcare are not meeting the recommended guidelines of two hours of physical activity a day. While childcare providers have the potential to impact the health of these young children, the quality and quantity of physical activity in child care settings can vary depending on indoor space, gross motor play equipment, outdoor play area, group size, and the education and training of child care staff. Many childcare centers do not have the facilities or staff to offer the necessary opportunities for young children to develop their movement skills. When children return home, often at the end of their parents' work day, there may be little time left for physical activity at home. As a result, children in many childcare centers do not get enough physical activity.

Schools that decrease opportunities for physical activity

Over the last decade, many schools have been forced to cut physical education because of budget constraints and the need to increase academic test scores. Participation in physical education (PE) among high school students decreased significantly between 1991 and 1995 and has remained low since then. When children do participate in PE it is for fewer days per week than is recommended. Only 8% of elementary schools and 6% of middle, junior and senior high schools provide daily physical education for all students during the entire school year. Today, only 28% of high school students nationally, and 21% of Rhode Island high school students, attend PE daily. When those children are in physical education classes, 20% do not get even 20 minutes of physical activity during class.

In Rhode Island, elementary schools average only 55 minutes per week of PE, far below the recommended 150 minutes per week for these schools. Middle schools in Rhode Island average 100 minutes per week, and high schools average 120 minutes per week . This is also less than the recommended 225 minutes per week for middle and high school students.

The need for more instructional academic time, safety and liability concerns, lack of staff to supervise children, and concerns about disrupting children's work patterns have led some schools to cut another opportunity for physical activity – recess. More than a quarter of all elementary schools do not provide regularly scheduled recess for all students in kindergarten through fifth grade. Without PE and recess, children are spending their entire school day, about seven straight hours, without any physical activity.

Communities that feel unsafe

Neighborhood safety affects physical activity levels. In one study, only 27% of people without access to safe places to walk met physical activity recommendations, compared to 43% of people with access to safe places to walk. Parents report that safety considerations are the most important factor in selecting play spaces for their young children. "Traffic danger" and "stranger danger" are major reasons why parents drive their children to school or do not allow them to walk to or play in the neighborhood. These safety concerns limit children's outdoor play, which is concerning because children who play outside tend to have higher physical activity levels. Safety concerns are often an even greater issue among low-income families who live in urban neighborhoods, as these areas are often perceived as unsafe. The result is that parents who are

concerned about their neighborhood's safety often replace their child's outdoor play with television (TV), video games, or other sedentary forms of recreation. This is especially concerning among low-income children, who spend significantly more time in front of a screen than children with greater household incomes.

Rhode Island Physical Activity Objectives

HEALTH has adopted the following physical activity objectives for adults, children and adolescents.

Goal: All Rhode Islanders will meet physical activity recommendations

Objective 3a: By 2010, __% of adults will engage in moderate physical activity for at least 30 minutes on at least 5 days of the week.

Baseline:
Potential data source: Add to BRFSS

Objective 3b: By 2010, __% of adolescents and children will engage in moderate physical activity for at least 60 minutes daily.

Baseline:
Potential data source: Modify YRBS question, Rhode Island HIS

Screen Time

Importance of Reducing Screen Time

Screen time, defined as time spent watching TV, playing video games, watching videos, or using a computer for recreation, is the most common form of recreation today. Studies indicate that American children spend more time watching television than they do in any other activity besides sleeping. The 1000 plus hours a year the average child spends in front of a screen displaces other more productive activities such as physical activity, reading, time with family and friends, and more. Because screen time is the most common form of sedentary behavior, making even small reductions can result in large public health gains.

Many studies show a connection between screen time and weight. National data show that the prevalence of obesity is highest among children who watch four of more hours of TV per day and lowest among those who watch less than one. An estimated 25 to 60% of the increase in obesity and overweight in recent years may be due to screen time. It even appears that each hour of additional screen time corresponds to an increase in the risk of overweight. Children with a TV in their bedroom may be at even greater risk of overweight.

Screen time may contribute to overweight in three ways:

1) by replacing physical activity with sedentary activity,

2) by decreasing metabolic rate, and

3) by increasing calorie consumption.

Sedentary Activity

Screen time can displace physically active time. Research suggests that children who spend the most time in front of a screen are the least active. In one study, children who spent more than two hours a day watching TV played less than children who watched less than two hours a day.

Metabolic Rate

Some research indicates that the excessively sedentary nature of screen time may undermine the benefits of physical activity by actually decreasing metabolic rate. One study found that children expended more energy at rest than they did while watching TV, adding up to an estimated decrease of 200 calories per day. This theory has also been tested in adults. In another study, TV time was positively associated with obesity more than other sedentary behaviors such as sitting at work.

Calorie Consumption

In addition to the sedentary nature of screen time, children are also influenced by their exposure to food advertising, which encourages the consumption of high fat, high calorie foods. Children's shows advertise food once every five minutes. Exposure to these advertisements makes it more likely that children will choose the high fat, high calorie foods advertised, that they will ask their parents for these foods, and that their parents will buy these foods. In addition to television commercials, food advertising is now prevalent in video games and on the internet.

Reducing screen time can increase physical activity levels and improve BMI. One study showed that children who limited their screen time to no more than seven hours per week decreased their BMI and body fat percentage, without additional prompting to be more physically active. Another study showed that children who agreed to not engage in any screen time for one week had about 109 extra screen-free minutes per day and participated in 4.3 different leisure time activities. Children who did not limit their screen time spent 22 more minutes per day in front of a screen and engaged in only three different leisure time activities. In addition to screen time's contribution to obesity, excessive screen time has also been linked to violence, underachievement, and poor social skills.

National Recommendations

Many national organizations recommend that children over age two watch two or fewer hours of television per day, and children under the age of two watch no TV.

The Problem: Too Much Screen Time

Screen Time among Rhode Island Youth

Too many children are spending too much time in front of a screen. U.S. children spend approximately 4.5 hours a day in front of a screen. Forty-six percent of U.S. elementary school students, 51% of middle school students, and 45% of high school students watch two or more hours of TV on the average school day. Thirty-eight percent of U.S. high school students are watching three or more hours of television daily. Even very young children are watching too much TV. One study found that 41% of 24- to 36-month-olds are watching more TV than recommended.

Almost a third (32%) of Rhode Island high school students are watching three or more hours of TV per day. According to another local data source, 15 to 20% of elementary and middle school students reported watching four or more hours of TV, and another 9 to 12% reported playing more than four hours of computer or video games.

Screen Time Disparities among Rhode Island Youth

As is seen nationally, TV watching is disproportionate among different population groups in Rhode Island. The prevalence of high screen time levels is higher among:

- Males (36% vs. 27% females)
- Hispanic (42% vs. 28% Whites)
- Low income children

Barriers to Reducing Screen Time

Sitting in front of a screen has become an easier and more convenient option than being physically active. TVs, computers, and video games have saturated the environment. The average child today has access to multiple television sets with dozens of channels, a VCR or DVD player, a video game console, and a computer with Internet access. Ninety-eight percent of children live in homes with at least one TV set and the average family has four. Almost half of children have a TV in their bedroom. Other forms of media are also making their way into children's bedrooms: 39% have a video game console, 30% have a VCR, 20% have a computer, and 11% have Internet access.

TV, videos, and video games are often seen by parents as inexpensive forms of entertainment that keep children happy and supervised. This "media saturation" combined with the low cost and convenience of these activities has led to the development of physically inactive interests and pastimes. Rather than being active, children often come home and watch TV, play videogames, or surf the web.

Rhode Island Screen Time Objectives

HEALTH has adopted the following screen time objective:

Goal: All Rhode Island adolescents and children will meet recommendations for screen time

Objective 4 By 2010, _____% of adolescents and children will spend two or fewer hours per day in front of a screen (i.e., TV, video, videogames, recreational computer use).

Baseline:
Potential data source: Rhode Island HIS, YRBS, SALT Survey

IV. Environmental Solutions

Short-Term Objectives by Setting

A. Schools and After School Programs

- Objectives
- Sample Strategies

B. Early Childhood Settings

- Objectives
  A. Child Care Facilities (CCF)
  B. Early Childhood Providers (ECP)
- Sample Strategies

C. Communities

- Objectives
  A. Community Access to Healthy Food (CAF)
  B. Community-Programs (CP)
  C. Community Access to Physical Activity (CAP)
  D. Breastfeeding
- Sample Strategies

D. Worksites (W)

- Objectives
- Sample Strategies

E. Health Care (H)

- Objectives
  A. Physical Activity and Nutrition
  B. Healthy Weight
  C. Breastfeeding
- Sample Strategies

F. Communications

- Objectives
- Sample Strategies

G. Data and Surveillance

- Objectives
- Sample Strategies

H. Infrastructure

- Objectives
- Sample Strategies

The current epidemic of obesity is caused largely by an environment that promotes excessive food intake and discourages physical activity.

JO Hill & JC Peters, Environmental Contributions to the Obesity Epidemic

Past attempts at improving nutrition and physical activity have focused primarily on individual behavior change through one-on-one counseling, education and support groups. These types of interventions have been moderately effective at improving nutrition and physical activity behaviors. The problem is that it is extremely difficult to begin and sustain healthy lifestyle changes without a supportive environment.

As recently as a century ago, virtually all babies were breast-fed; most meals were grown, prepared and eaten at home; people needed to be physically active to get from place to place; and generating income and maintaining households were physically demanding. As recently as 50 years ago, screen time was not an issue because there were no televisions, VCRs or videogames, nor were there as many timesaving devices in American households. However, lifestyles have changed and so too has the environment.

The current environment is characterized by an essentially unlimited supply of convenient, relatively inexpensive, highly palatable, energy-dense foods, coupled with a lifestyle requiring only low levels of physical activity for subsistence. Expenditure on foods prepared outside of the home now accounts for over 40% of a family's budget spent on food. Soft drink consumption supplies the average teenager with over 10% of their daily caloric intake. Portion sizes have increased dramatically. Fewer women are home with their children for the first year of life, and workplaces do not support nursing mothers. Fewer children walk to school, and adults and children make fewer walking trips to shop. Hectic schedules allow little time for recreational physical activity. Fewer jobs require physical activity, and are not accessible except by automobile. Schools are dropping recess and physical education and assigning more homework. Television viewing has increased. Neighborhoods and parks are perceived as unsafe for walking and playing. Community design discourages physical activity. Instead of encouraging healthy choices, the 21st century environment in America promotes behaviors that lead to obesity. To reverse the obesity epidemic, this environment must be changed.

The following short-term objectives in schools, child care facilities, communities, worksites and health care are focused on implementing policies, programs and environmental supports that will help:

"Make the healthy choice the easy and affordable one."

Short-Term Objectives

Short-term objectives (3 to 5 years) in this plan focus on policies, programs, and environmental supports that will effect improve nutrition, increase breastfeeding, increase physical activity, reduce screen time, and ultimately reduce the prevalence of overweight and obesity among all Rhode Islanders.

Objectives are categorized by seven settings for intervention:

- Schools and After School Programs
- Childcare Facilities
- Worksites
- Community Based Programs and Resources
- Community Environments for Physical Activity
- Community Environments for Healthy Eating
- Healthcare and Health Plans

These objectives are based on the best available scientific information, national recommendations, best and promising practices, and the knowledge and expertise of the members of the *Healthy Eating and Active Living Collaborative*. These objectives serve as a guide to assist organizations and individuals in selecting and implementing interventions appropriate to their setting and needs.

For each objective, strategies are evidence-based, culturally and linguistically appropriate for the target audience, and will utilize the social marketing approach, as well as formative, process, impact and outcome evaluation strategies during development and implementation when appropriate. (Sections V and VI).

Schools and After School Programs

Schools are one of the primary locations for reaching children and adolescents. Children spend about 7 hours per day and nearly 2,000 hours per year at school. In 2000, 53.2 million students were enrolled in public and private elementary and secondary schools in the United States. Both inside and outside the classroom, schools provide opportunities for the concepts of energy balance to be taught and put into practice as students learn about good nutrition, physical activity, and their relationships to health, engage in physical education, and make food and physical activity choices during school meal times and through school-related activities. Schools offer many other opportunities for learning and practicing healthy eating and physical activity behaviors. Coordinated changes in the curriculum, the in-school advertising environment, and after school programs all offer the potential to advance obesity prevention efforts.

Eighteen percent (18%) of Rhode Island's K-12 youth participate in after school programs. On average, after school participants spend 10 hours per week in after school programs. Participation averages 3.7 days per week for 2.6 hours per day. Thirty percent (30%) of the K-12 youth in self-care would be likely to participate in an after school program if one were available in the community. Similarly, 28% of all children not in after school would be likely to participate if an after school program were available in the community, regardless of their current care arrangement. Because of the large number of children who do, or would participate in after school programs if they were available, nutrition and physical activity interventions in after school programs have the potential to benefit many children. Schools and after school programs can also reach staff and families. Programs that encourage families or staff members to be active together can improve social support and provide role modeling, which have been positively associated with children's nutrition and physical activity levels.

Short-Term Objectives in Schools and After School Programs

* Denotes School Objectives that were identified as priority objectives by the Rhode Island Healthy Eating and Active Collaborative at its first meeting in May.

** See Childhood Obesity School-Aged Work Group Action Plan. (Appendix __)

***Objective S1: By 2008, increase the number of school districts that implement policies limiting unhealthy foods and beverages on campus and encouraging the distribution and consumption of safe and healthy foods and beverages.**

Proposed Partners:
School-Aged Work Group; Coordinated School Health Program; RI Healthy Schools Coalition; RI Child Nutrition Programs; Kids First; RI After School Plus Alliance; New England Dairy Council

Possible Policies:

- Implement a policy requiring that all foods and beverages sold in snack bars, vending machines and a la carte lines comply with state nutrition guidelines.
- Implement a school meals policy that limits high-fat items (those that provide more than 40% of calories from fat) to once per week.
- Implement a milk policy excluding whole milk and requiring that only fat-free and skim milk be offered in schools.
- Implement a policy increasing the number and variety of fruits and vegetables served in the school breakfast and lunch programs.
- Implement a policy requiring that all foods and beverages provided in before-and after-school programs comply with state nutrition guidelines.
- Implement a fundraising policy that requires that any fundraising activity involving food comply with state nutrition guidelines.
- Implement a classroom snack policy requiring that snacks, if offered, make a positive contribution to children's diets and health, with an emphasis on serving fruits and vegetables as the primary snack and water as the primary beverage.
- Implement a school events policy that requires all foods and beverages offered or sold at school events to comply with state nutrition guidelines.
- Implement a student rewards policy that prohibits the use of food and beverages as reward or punishment.
- Implement a policy requiring that adequate time be provided for school breakfast (at least 10 minutes after being seated) and school lunch (at least 20 minutes after being seated).
- Implement a policy banning pastries in the School Breakfast Program
- Implement a policy that restricts the advertising and marketing of unhealthful foods and beverages on the school campus.

Sample Strategies:

- Provide training, technical assistance and resources for School Wellness Subcommittees to use in development and implementation of policies.**
- Develop and disseminate toolkits for School Wellness Subcommittees.
- Develop state endorsed policy language for nutrition that includes nutrition guidelines for all competitive foods available in schools and a corresponding approved foods list.
- Advocate for legislative action.
- Expand and strengthen school relationships with vendors/distributors of healthful foods and beverages.
- Facilitate getting healthier foods and beverages into the schools.

***Objective S2: By 2008, increase the number of school districts that provide sequential multidisciplinary nutrition and physical activity education for students in grades K-12, that is behaviorally-focused and uses active learning skills.**

Proposed Partners:
School-Aged Work Group; Coordinated School Health Program; RI Healthy Schools Coalition; RI Child Nutrition Programs; Kids First; RI Association of Health, Physical Education, Recreation and Dance; New England Dairy Council

Sample Strategies:

- Provide training, technical assistance and resources to School District Wellness Subcommittees regarding ideas for integrating behaviorally-focused activities that include active learning opportunities.**
- Advocate for curriculum changes with the RI Department of Education.
- Integrate nutrition education with the School Meals Program.
- Require professional development on the RI PE Standards for all health and PE teachers.
- Provide annual professional development training in skill-based nutrition education and physical activity for teachers.
- Provide model curricula for schools and teachers.

*Objective S3: By 2008, increase the number of schools with farm-to-school programs.

Proposed Partners:
Kids First; Farm Fresh RI; Coordinated School Health Program; RI Division of Agriculture; RI Center for Agricultural Promotion and Education; School-Aged Work Group, New England Dairy Council

Sample Strategies:

- Implement Happy Apple Award Program to recognize school districts that purchase local farm products and schools for creatively integrating locally grown food into the school environment.
- Maintain on-line database of local farms geared toward Food Service Directors that includes recipes for institutions, harvest calendar, “kids picks”, menu ideas, promotional materials, etc.
- Advocate for legislation that provides financial incentives for school districts to purchase local farm products.
- Educate school administrators, food service directors and School Wellness Subcommittees regarding benefits of purchasing local farm products.
- Offer Farm Tours at reduced prices to all food service directors.
- Explore possibility of creating funds and permanent position for a Farm-to-School Coordinator.
- Develop and implement staff education program for school districts that includes a trip to a Farmer’s Market, to a farm, to a processing plant and to a kitchen for taste testing.

***Objective S4: By 2008, increase the number of school districts that provide staff wellness programs which include nutrition education, obesity prevention, weight management and screen time education.**

Proposed Partners:
School-Aged Work Group; Coordinated School Health Program; Worksite Wellness Council of RI; State Employees Wellness Program; RI Healthy Schools Coalition; Kids First; YMCA; New England Dairy Council

Sample Strategies:

- Provide training, technical assistance and resources to District School Wellness Subcommittees regarding staff wellness programs that include nutrition education, obesity prevention, weight management and screen time reduction.**
- Facilitate staff participation in worksite wellness initiatives.
- Develop and implement pilot worksite wellness programs.
- Develop and disseminate wellness articles for school staff.
- Develop and implement Health Risk Appraisal Program for school staff.
- Develop and distribute family-based TV Turnoff Week Kits to District School Wellness Subcommittees.
- Provide schools with evidence-based programs that could be used, e.g., YMCA behavior change program.

***Objective S5: By 2008, increase the number of school districts that provide nutrition education programs, obesity prevention programs, weight management programs and programs that encourage reducing screen time for families.**

Proposed Partners:
School-Aged Work Group; Coordinated School Health Program; RI Healthy Schools Coalition; RI Child Nutrition Programs; Kids First; YMCA; New England Dairy Council

Sample Strategies:

- Provide training, technical assistance and resources to District Wellness Subcommittees about the benefits of providing educational programs for families. **
- Provide schools with evidence-based programs that could be used, e.g., YMCA behavior change program.
- Provide training and technical assistance to schools as they implement the programs.
- Assist schools in finding funding for such programs.
- Develop and distribute family-based TV Turnoff Week Kits to District School Wellness Subcommittees.

***Objective S6: By 2008, increase physical education minutes to 150 minutes per week for K-6 graders and 225 minutes per week for 7-12 graders.**

Proposed Partners:
School-Aged Work Group; RI Department of Education; Coordinated School Health Program; RI Association of Health, Physical Education, Recreation and Dance; RI Healthy Schools Coalition

Sample Strategies:

- Collaborate with District Wellness Subcommittees and School-Aged work groups to advocate with the General Assembly and the Board of Regents for strengthened physical education requirements in schools.**
- Require that health and physical education teachers be trained in Rhode Island Physical Education Standards.
- Provide District Wellness Subcommittees with training and resources regarding evidence-based programs, such as SPARK PE or CATCH that can help teachers meet standards.
- Provide District Wellness Subcommittees with best practices and success stories.
- Include daily Physical Education in the Governor's School Awards Program criteria.
- Incorporate physical fitness assessments in schools, such as TriFit or Fitness Gram.

***Objective S7: By 2008, increase the number of schools and school districts that provide families with opportunities to be physically active**.

Proposed Partners:
School Wellness Subcommittees; YMCAs; RI Healthy Schools Coalition; Kids First; Coordinated School Health Program; School-Aged Work Group; Parent Teacher Organizations; Community Coalitions

Sample Strategies:

- Partner with community centers to bring programs onsite.
- Include school based physical activity in parents engagement piece of toolkit.
- Develop sample activities, events, and fundraisers for Subcommittee toolkits
- Develop and distribute via Subcommittee toolkits model policies for schools to open recreation facilities after hours .

Objective S8: By 2012, increase the number of schools in Rhode Island that implement a breastfeeding education curriculum.

Proposed Partners:

RI Breastfeeding Coalition; State Breastfeeding Coordinator; RI Department of Education; Public, Private and Charter Schools

Sample Strategies:

- Identify schools interested in piloting a breastfeeding education curriculum.
- Provide sample breastfeeding curriculum to pilot (e.g., New York State curriculum).
- Provide training and technical assistance as needed.
- Recognize schools that successfully adopt curriculum.

Objective S9: By 2008, increase the number of school districts with policies or programs that provide opportunities for physical activity that are not a substitute for physical education.

Proposed Partners:
School-Aged Work Group; Coordinated School Health Program; RI Association for Health, Physical Education, Recreation and Dance; RI Island Healthy Schools Coalition; RI Department of Education; Kids First

Possible Policies:

- Implement a policy that opens the school after hours for physical activity.
- Implement a policy requiring that opportunities for physical activity be integrated into regular classes throughout the school day.
- Implement a policy requiring daily recess at all elementary schools.
- Implement a policy requiring that after-school programs provide opportunities for physical activity.

Sample Strategies:

- Provide training, technical assistance and resources for School Wellness Subcommittees to use in development and implementation of policies.**
- Require staff training on incorporating PA into the curriculum.
- Endorse State Physical Activity policy for schools.
- Provide info on *Brain Gym*, *Take 10*, and other promising practices.
- Provide model policies on integrating PA and on requiring recess.

- Include physical activity during the school day in Governor's Awards Program criteria.
- Educate decision makers about the benefits of physical activity during the school day in terms of both health and academics.

*** **Objective S10: By 2008, increase the number of after school programs that implement policies, programs and environments that support and promote physical activity and healthy eating behaviors.**

Proposed Partners:
School-Aged Work Group; Coordinated School Health Program; RI Island After School Plus Alliance; Kids First; RI Healthy Schools Coalition; YMCA; New England Dairy Council

Sample Strategies:

- Encourage after school program organizations to participate in District School Wellness Subcommittees**.****
- Provide training and technical assistance to after school programs regarding nutrition and physical activity guidelines and model programs.,
- Provide after school programs with toolkits to improve physical activity and nutrition.
- Encourage after school programs to adopt state nutrition and physical activity policies and guidelines.
- Develop and implement an after school program award/recognition program.
- Develop an after school program parent guide that includes all after school programs that include physical activity and nutrition education **.
- Implement a policy limiting screen time in after-school programs.
- Build partnerships with groups working in before- and after-school care.
- Mobilize communities around the need for after school care, especially in underserved areas and the need for after school physical activity.
- Advocate for low cost After School Programs that provide physical activity and hands-on nutrition education activities.
- Advocate for policies that require ongoing training for after school providers.
- Provide After School Programs with guidelines and best practices, including model policies for programs to set aside time for physical activity, require regular staff trainings, etc.
- Educate After School Program administrators about the benefits and ease of incorporating physical activity into the After School Program setting.
- Secure funding for curriculum and training.
- Develop/adopt and implement After School Program campaign,

*** **Objective S11: By 2008, increase the number of school districts with policies or programs that encourage active transportation.**

Proposed Partners:
School-Aged Work Group; RI Statewide Planning; RI Department of Transportation; RI Injury Prevention Program; Coordinated School Health Program; RI Healthy Schools Coalition; Kids First; Police Departments; Parent Teacher Associations

Sample Strategies:

- Provide training, technical assistance and resources to District Wellness Subcommittees regarding policies and programs that encourage active transportation.**
- Develop and release Requests for Proposals (RFPs).
- Assist communities in forming Safe Routes teams.
- Provide technical assistance in completion of walkability assessments and development of Safe Routes action plans.
- Educate schools, planners, community members, PTAs, law enforcement, community groups, and elected officials about benefits of Safe Routes improvements.
- Provide workshops for professional groups to garner support.
- Provide workshops for schools or districts to layout how the program works.
- Provide school planning workshops, to include assessments, with consultant and planner.
- Develop RI Safe Routes toolkit.
- Encourage communities to apply for Transportation Improvement Program and enhancement funds in addition to SR2S.
- Develop a campaign that emphasizes the successes of other active transport programs.
- Provide training and assistance in developing walking school busses.
- Develop model policies for schools to adopt (e.g., walkers leave before bussers and pick ups).
- Include in Governor's Schools award.
- Hold Walk-to-School Day to raise awareness.
- Develop a student engagement campaign

****Objective S12: By 2008, increase the number of schools that implement school garden programs.**

Proposed Partners:
School-Aged Work Group; RI Center for Agricultural Promotion and Education (RICAPE); Kids First; RI Healthy Schools Coalition; URI Master Gardener's Program

Sample Strategies:

- Provide training, technical assistance and resources regarding School Gardens to School District Wellness Subcommittees.**
- Assist schools in partnering with community organizations to ensure sustainability of school garden program.
- Include implementing a School Garden Program in the Governor's School Award Program.
- Leverage funding to ensure sustainability.
- Collaborate with teachers to integrate school gardening into the curriculum.

- Encourage visits to local farms and visits from local farmers.
- Provide educational classes, tips, resources in conjunction with school gardening.

Objective S13: By 2008, increase the number of schools that address screen time education in their school improvement plans.

Proposed Partners:
School Improvement Teams; District School Wellness Subcommittees; Coordinated School Health Program; School-Aged Work Group

Sample Strategies:
- Provide training, technical assistance and resources to School Wellness Subcommittees regarding the importance of screen time education.**
- Educate school improvement teams to use SALT data to identify screen time problems.
- Supply School Improvement Teams with Best Practices, guidelines and model programs
- Declare statewide TV Turnoff Week.
- Develop model language for use in school improvement plans.
- Provide training on selected curriculum or program.

Early Childhood Settings

Reliance on child care has grown rapidly over the past three decades. The percent of mothers in the work force rose from 38% in 1970 to 68% in 2000. Today, 60% of mothers of preschool-aged children are employed with 70% working full-time and 30% working part-time. Recent estimates indicate that of the nation's 19 million children five years of age or younger, 12 million or 61% are in some form of child care on a regular basis. Child care participation is at an all-time high; in fact, it is now the norm. Parents and child care providers are now sharing responsibility for a large and growing number of children during important developmental years, making child care an important setting in which to address the problem of overweight and obesity. Child care settings can be a major force in shaping children's dietary intake, physical activity and energy balance. They can lay the foundations for health and create environments to ensure that young children are offered healthful foods and regular physical activity.

Child care organizations can support breastfeeding by increasing current awareness of the need for protecting, promoting, and supporting breastfeeding; initiating new training programs to improve child care providers' knowledge about breastfeeding and its importance; participating in health promotion campaigns that disseminate information about the benefits of breastfeeding; and teaching child care providers how to store, handle, and feed mother's milk. In summary, childcare providers are in a unique position to influence the youngest children and their parents by promoting nutrition, breastfeeding, physical activity, and reduced screen time. These providers can offer an ideal location for introducing the concepts of healthy eating and active living to the youngest children, while also supporting parents in achieving or maintaining a healthy lifestyle.

Short-Term Objectives in Early Childhood Settings

* Denotes Child Care Objectives that were identified as priority objectives by the Rhode Island Healthy Eating and Active Collaborative at its first meeting in May.

** See Childhood Obesity Early Childhood Work Group Action Plan. (Appendix __)

A. Child Care Facilities (CCF)

***Objective CCF1: By 2008, increase the number of licensed childcare facilities that provide menus consistent with the 2005 Dietary Guidelines and USDA Child and Adult Care Food Guidelines.**

Proposed Partners:
HEALTH Child Care Liaison, Child Nutrition Programs, Child Care Providers, Head Start, Kids First, Food Stamp Nutrition Education Program, Healthy Child Care Rhode Island , Child Care Support Network , CHILDSPAN, Successful Start ,Child Care Directors' Association , Family

Child Care Homes of RI, RI Department of Youth, Children and Families; Early Childhood Work Group

Sample Strategies:

- Provide training for child care providers regarding menu planning to meet Dietary Guidelines.
- Provide ongoing technical assistance to child care providers in development and implementation of menus.
- Advocate for state to include revised standards for menus in child care licensing regulations.
- Develop and implement a state policy requiring child care program meals to be consistent with the Dietary Guidelines for Americans 2005.
- Develop and implement Award Program to recognize child care providers whose menus meet or exceed the Dietary Guidelines.
- Provide child care providers with toolkits and educational resources for assessing and implementing menus that comply with Dietary Guidelines.
- Provide evidence-based child care nutrition programs, e.g., North Carolina NAPSACC Program, with child care providers

Objective CCF2: By 2008, increase the number of licensed childcare facilities that implement nutrition guidelines consistent with the 2005 Dietary Guidelines for all foods and beverages brought from home.

Proposed Partners:

HEALTH Child Care Liaison; Child Nutrition Programs; Child Care Providers; Head Start; Kids First; Food Stamp Nutrition Education Program; Communications Work Group; Healthy Child Care Rhode Island; Child Care Support Network; CHILDSPAN;
Successful Start; Child Care Directors' Association; Family Child Care Homes of RI;
RI Department of Youth, Children and Families; Early Childhood Work Group

Sample Strategies:

- Provide training for child care program staff in nutrition guidelines for all foods and beverages brought from home.
- Develop and disseminate educational materials that could be sent home to parents.
- Provide technical assistance to child care providers regarding implementation of nutrition guidelines for all foods and beverages brought from home.
- Develop and disseminate model child care program guidelines for foods and beverages brought from home.
- Disseminate guidelines to all child care providers.
- Provide child care providers with toolkits and educational materials for use with parents.
- Ensure that nutrition education messages provided to parents regarding foods and beverages brought from home are consistent with messages received from other child care providers.

Objective CCF3: By 2008, increase the number of licensed childcare facilities that provide healthy eating and active living education for staff, parents & children.

Proposed Partners:
HEALTH Child Care Liaison; WIC; Head Start; Kids First; Child and Adult Care Food Program; URI Food Stamp Nutrition Education Program; Communications Work Group
Healthy Child Care Rhode Island; Early Childhood Work Group; Child Care Support Network; CHILDSPAN; Successful Start; Child Care Directors' Association; Family Child Care Homes of RI; RI Department of Youth, Children and Families; Early Childhood Work Group

Sample Strategies:

- Develop/adopt and disseminate a healthy eating and active living toolkit for child care providers that includes components for in-center activities and family engagement.**
- Provide ongoing trainings on the use of the toolkit.
- Develop and disseminate educational materials available for use with staff, parents and children.**
- Develop and disseminate PowerPoint presentations, videotapes, DVD's and online programs.**
- Adapt existing nutrition education materials or create/order new ones that deliver age-appropriate educational materials with consistent nutrition and physical activity messages for children and their parents.**
- Provide ongoing technical assistance to child care providers

Objective CCF4: By 2008, increase the number of licensed childcare facilities that have policies and programs in place to support physical activity.

Proposed Partners:
HEALTH Child Care Liaison; Early Childhood Work Group; WIC; Head Start; Kids First; RI Association for Physical Education, Recreation and Dance; Healthy Child Care Rhode Island; Child Care Support Network; CHILDSPAN; Successful Start; Child Care Directors' Association; Family Child Care Homes of RI; RI Department of Youth, Children and Families

Sample Strategies:

- Develop and disseminate model physical activity policies for childcare facilities.
- Develop/adopt a physical activity curriculum for childcare facilities.
- Provide facilities with ongoing trainings on physical activity curriculum.

Objective CCF5: By 2008, increase the number of licensed childcare facilities that implement policies and programs to reduce screen time.

Proposed Partners:
HEALTH Child Care Liaison; WIC; Head Start; Kids First; RI Association for Physical Education, Recreation and Dance; Healthy Child Care Rhode Island; Child Care Support Network; CHILDSPAN; Successful Start; Child Care Directors' Association; Family Child Care Homes of RI; RI Department of Youth, Children and Families

Sample Strategies:
- Develop and disseminate model screen time policies for childcare facilities.
- Develop a screen time component for a healthy eating and active living toolkit.
- Provide ongoing technical assistance to child care providers regarding implementation of model policies.

Objective CCF6: By 2010, increase the number of licensed childcare facilities that implement policies, programs and environments that support breast feeding mothers.

Proposed Partners:
HEALTH Child Care Liaison; Child Nutrition Program; Healthy Child Care Rhode Island; Child Care Support Network; CHILDSPAN; Successful Start; Child Care Directors' Association; Family Child Care Homes of RI; RI Department of Youth, Children and Families; State Breastfeeding Coordinator

Sample Strategies:
- Develop state policy regarding breastfeeding support at child care facilities and incorporate breastfeeding guidelines into new child care licensing regulations.
- Assist child care providers in creating a space for mothers to breastfeed their children on-site.
- Create recognition program for child care facilities that support and promote breastfeeding.
- Provide ongoing technical assistance and resources for child care providers.

B. Early Childhood Providers (ECP)

Overarching Goal:

All families receive consistent messages about healthy eating, physical activity, reduced screen time, and breastfeeding form programs, care providers, and others.

Objective ECP1: Create consistent messages for families and service providers around healthy eating and active living that can be used in a variety of settings.**

Proposed Partners:
Early Childhood Work Group

Sample Strategies:

- Evaluate current materials and integrate best practice information into a set of key themes/ideas that can be submitted to communications experts and developed for use in a variety of settings.
- Collect and compare existing materials in targeted behavior areas that are distributed to families in different settings.
- Establish subgroup with key partners to review message consistency and content.
- Develop action steps from work plan.
- Review existing materials to address inconsistencies and create consensus around message content.
- Research and determine current best practices on discordant messages.
- Develop recommendations for message content for materials for family and clinician materials.
- Identify information networks through which materials are disseminated.
- Disseminate messages for review and integrate feedback into messages.
- Identify sustainable funding for production and distribution of materials.
- Develop distribution mechanism.
- Identify mechanism/process to evaluate and integrate updated resources.
- Develop and test materials with target populations.
- Disseminate materials to information networks for distribution.

Objective ECP2: Create a system for delivering technical assistance around working with families to promote healthy eating and active living.**

Proposed Partners:
Early Childhood Work Group

Sample Strategies:

- Develop an outline for topics to be included in training plan for early childhood providers.
- Develop methods to disseminate training.

Objective ECP3: Create a system for delivering technical assistance around working with families to promote healthy eating and active living.**

Proposed Partners:
Early Childhood Work Group

Sample Strategies:

- Create toolkits and provide resources, including referral sources for different types of early childhood service providers.
- Develop decision tree based upon anthropometric status, key problematic behavior and other physiologic risk factors for birth to 23 months and 2-5 year-old age groups.
- Develop a toolkit that includes BMI percentile charts, BMI calculator, ways to assess problematic behaviors, referral sources and suggestions for education materials.

Objective ECP4: Develop and implement policies that allow early childhood programs and professionals to support the four main behaviors that impact healthy eating and active living.**

Proposed Partners:
Early Childhood Work Group

Sample Strategies:

- Create consensus about key areas for change.
- Evaluate current polices at the local, state and national level and assess opportunities to develop new policies.
- Prioritize which changes are most valuable.
- Gain support for recommended changes in the community.

Objective ECP5: Create and sustain an environment that supports healthy eating, physical activity, reducing screen time and breastfeeding.

Proposed Partners:
Early Childhood Work Group

Sample Strategies:

- Identify opportunities for creating policy change or environmental improvement.
- Distribute lists of public parks, opportunities for physical education, farmers' markets, etc.
- Evaluate menus and vending machines in child care programs.
- Evaluate physical activity policies in child care programs.
- Evaluate community environment for safety.
- Identify opportunities for physical activity in communities.

Communities

Communities provide many opportunities to support and promote healthy eating and physical activity through community coalitions, local governments**,** community-based organizations, grocery stores and restaurants.

Community actions can engage community-based social and civic organizations, faith-based groups, and many other community partners. Community coalitions can coordinate these community efforts and leverage and network resources. Specific attention should be given to those populations at high-risk of becoming obese, including minorities and low-income families. Private and public efforts to eliminate health disparities should include obesity prevention as one of their primary areas of focus and should support community-based collaborative programs to address social, economic and environmental barriers that contribute to the increased obesity prevalence among certain populations.

Community coalitions can be formed to facilitate and support cross-cutting programs and community-wide efforts. Through these coalitions, local governments, public health agencies, business partners and community-based organizations can work together to increase access to healthful foods and opportunities for physical activity and to develop and promote programs that encourage healthy eating behaviors and physical activity.

Local governments have especially important roles to play in obesity prevention, as they can focus on specific needs of their cities and neighborhoods. Many of the issues involved in preventing overweight and obesity—including actions on street and neighborhood design, plans for parks and community recreational facilities, locations of new schools and retail food facilities, zoning for access to healthful foods and decreased access to unhealthful foods—require decisions by county, city, or town officials. Local governments can provide coordinated leadership and support for obesity prevention efforts by increasing resources and strengthening policies that promote healthy eating and opportunities for physical activity in communities, neighborhoods and schools.

Communities can also be instrumental in supporting and promoting breastfeeding as the normal and preferred method of infant feeding. All breastfeeding women and their partners need reliable and culturally appropriate sources of information and social support for breastfeeding. More broadly, the way others view and discuss breastfeeding influences how a woman perceives her infant feeding options. Therefore, it is essential that breastfeeding mothers have access to supportive individuals and that communities create safe environments where women may breastfeeding comfortably in any of the places where mothers and children go.

Communities can utilize urban design approaches and transportation policy to make it easier and safer for residents to walk or bike to destinations or for recreation. Changes that affect community design can impact the physical activity levels of all residents. Access to community recreation spaces also influences physical activity levels. People in communities with the best access to a variety of built and natural facilities for recreation are 43% more likely to get 30 minutes of physical activity on most days than those with poor access. Access is important for children as well, since access to play spaces and facilities is positively related to physical

activity among youths of all ages. Maintaining existing parks and trails, and building new ones in areas of need can enhance access to these resources and encourage active recreation.

Community-based programs and resources can include formal agencies and informal groups, such as a neighborhood group or social club. These organizations and groups are often well-respected leaders and reach large number of people in the community. A great benefit of these programs is that they are often centered on providing a social and supportive atmosphere, which has been shown to be an effective way to change behavior.

Short-Term Objectives in Communities

* Denotes Community Objectives that were identified as priority objectives by the Rhode Island Healthy Eating and Active Collaborative at its first meeting in May.

** See Childhood Obesity Communities Work Group Action Plan. (Appendix __)

A. Community Access to Healthy Foods (CAF)

Overarching Goal Re: Sustaining Local Farms:

Increase use of locally grown farm products by creating the necessary infrastructure to address barriers at every level of the food production and distribution system.

*Objective CAF1: By 2008, increase the number of communities that implement Farmers Markets or farm stand programs.

Proposed Partners:

Farm Fresh RI; RI Division of Agriculture; Tourtellot & Co. Inc.; Johnson & Wales University; URI Cooperative Extension Program; URI Food Stamp Nutrition Education Program; URI Partnership on Food, Hunger and Nutrition; RI Center for Agricultural Promotion and Education; Minority Health Promotion Centers; RI Dept of Health WIC Program; RI Minority Health Promotion Centers

Sample Strategies:

- Provide training, technical assistance, toolkits and resources for communities to use in implementing Farmers' Market or farm stand programs.
- Consider alternatives to farmers staffing markets as they have limited time, e.g., food distributors deliver fresh produce to community-based organizations such as Minority Health Promotion Centers.
- Incorporate nutrition education, taste testing, cooking demos at the markets.
- Disseminate nutrition information at the markets.
- Partner with community based organizations and the media to publicize the markets.
- Assist Farmers Markets with acceptance of EBT cards.

***Objective CAF2: By 2008, increase the number of communities that implement farm-to-institution programs.**

Proposed Partners:

Farm Fresh RI; RI Division of Agriculture; Tourtellot & Co., Inc; Johnson & Wales University Culinary School; URI Cooperative Extension Program; URI Food Stamp Nutrition Education Program; URI Partnership on Food, Hunger and Nutrition; RI Center for Agricultural Promotion and Education; RI Minority Health Promotion Centers; Rhode Island Food Bank; State Employees Wellness Program (Get Fit RI); Worksite Wellness Council of RI; Minority Health Promotion Centers

Sample Strategies:

- Support legislation that will provide tax incentives for businesses that purchase local produce.
- Provide training and technical assistance for institutions regarding purchasing local produce.
- Create a centralized warehouse for the redistribution of locally grown foods to area institutional kitchens.
- Encourage partnerships between farms and food-processing industries (e.g., carrot peelers, milk processors, cheese factories, produce transporters, spaghetti-sauce makers); offer incentives / support to these industries to remain in the Rhode Island region.
- Encourage farmers (and food producers) to form cooperative entities by offering resources such as grant writing assistance, facilitation services, meeting spaces and stipends for traveling to other producer-cooperative models.

***Objective CAF3: By 2008, increase the number of underserved communities that provide enhanced transportation options for residents to get to markets that provide affordable fruits and vegetables or to get fruits and vegetables to residents in underserved areas.**

Proposed Partners:

Farm Fresh RI; RI Division of Agriculture; Tourtellot & Co., Inc.; RI Department of Transportation; RI Department of Health WIC Program; Senior Citizens Farmers Market Program; URI Cooperative Extension Program; URI Food Stamp Nutrition Education Program; URI Partnership for Food, Hunger and Nutrition; RI Center for Agricultural Promotion and Education; RI Minority Health Promotion Centers

Sample Strategies:

- Explore alternative ways of getting healthful foods to low-income residents throughout the state and throughout the year.
- Create free transport service to any RI Farmers' Market through partnerships with RI Department of Transportation and RI Department of Health (WIC Program).

- Establish “Grocery Bus Routes” or “Farmers Market Bus Routes” that offer reduced fares on certain days to bring residents in low-income communities to grocery stores that offer greater selections of affordable healthy food.
- Provide nutrition education and coupons on the bus.
- Partner with senior centers to provide transportation to and from Farmers Markets where seniors can use their farmers’ market coupons.
- Implement mobile markets, e.g. something like an ice cream truck that delivers fresh produce obtained from local farmers markets to low-income neighborhoods and community-based organizations.

*** **Objective CAF4: By 2008, increase the number of communities that offer financial and/or regulatory incentives to small neighborhood grocery stores to expand their inventory to include healthier food items.**

Proposed Partners:
URI Food Stamp Nutrition Education Program; URI Partnership on Food, Hunger & Nutrition; Grocers; Farm Fresh RI; Town Councils

Sample Strategies:
- Develop and implement incentives to assist small neighborhood grocery and convenience stores in expanding their selection of healthy foods and beverages.
- Provide technical assistance to small markets and convenience stores to assist them in expanding availability of fruits and vegetables.
- Assist smaller stores in addressing the challenges of higher wholesale costs by helping them collaborate with other small stores, thereby leveraging their collective buying power.
- Assist small grocers in reducing costs by having them buy their produce directly from local farmers to cut middleman costs.
- Work with Farm Fresh RI to create a "locally grown" certification / labeling system (i.e., proper labeling of fresh fruits and veggies, free marketing and promotional materials for qualified, small grocers).
- Encourage small stores to expand their healthy food selection by promoting healthy stores and healthy eating in the community, demonstrate customer demand, and provide technical assistance and resources.
- Connect smaller stores with small business development resources.
- Assist communities in conducting community outreach.

Objective CAF5: **By ___, x% of underserved communities will offer financial and/or regulatory incentives to attract supermarkets or other large food outlets to their communities.**

Proposed Partners:
URI Food Stamp Nutrition Education Program; URI Partnership on Food, Hunger & Nutrition; Grocery Store Owners; Farm Fresh RI; Rhode Island Food Bank; Community Planners; Town Council Representatives

Sample Strategies:

- Develop incentives to attract larger grocery stores to underserved communities.
- Provide technical assistance, toolkits to community leaders and planners in underserved communities to assist them in developing and implementing incentives.
- Educate community leaders about the benefits of new grocery store development (e.g., revitalization of community, creation of new jobs, capture dollars being spent outside the community, more local sales tax revenue).
- Educate grocers about the benefits of relocating in lower income communities (i.e., larger chains' highest grossing stores are in low-income communities).
- Assist grocery stores in identifying and securing a site and obtaining financing.
- Assist grocers in finding and keeping good employees by partnering with community groups to assist in recruitment and training.
- Assist grocery stores in cultivating relationships with local suppliers.
- Partner with community development corporations to advocate for a city to provide assistance, to garner community support, to help negotiate zoning and regulatory issues and to assist with financing.

Objective CAF6: **By 2008, increase the number of communities that implement community garden programs.**

Proposed Partners:
RI Center for Agricultural Promotion and Education; Southside Community Land Trust; Kids First; Farm Fresh RI; Grow Smart RI; URI Master Gardeners Program; Statewide Planning; Town Councils; local planners

Sample Strategies:

- Work with Zoning Ordinances to define a system which encourages vacant lots and open space to be converted into "food producing" zones.
- Change real estate tax structure to encourage individual and community food-producing gardens in the city.
- Offer on-street overnight parking for houses that are actively growing food in their backyard.

- Encourage local communities to clean up brown fields and reclaim vacant land

Objective CAF7: By 2008, increase the number of local planning agencies that include food access needs in their planning, zoning and development processes.

Proposed Partners:
Grow Smart RI; Local Planning Agencies; Statewide Planning; Local Planners

Sample Strategies:
- Assist local planning agencies in including food access needs in their planning, zoning and development processes.
- Educate local planners about the need to consider food access needs in planning, zoning and development process.
- Provide training and technical assistance to local planners as needed.

*Objective CAF8: By 2008, increase the number of full-service and fast food restaurants that provide healthy food and beverage options.

Proposed Partners:
Restaurant Association; Chefs' Association; RI Tourism Association; Chambers of Commerce; Kids First; RI Healthy Schools Coalition; New England Dairy Council

Sample Strategies:
- Develop and implement Restaurant Award Program **.
- Include healthy food and beverage options as a criterion in the Restaurant Award Program **.
- Increase the number of fruit and vegetable menu items and fruit and vegetable rich entrees served in restaurants and fast food establishments.
- Attractively merchandise and aggressively market fresh fruits and vegetables in season.
- Involve chefs in helping identify key culinary techniques, flavor approaches and menu strategies to put more fruits and vegetables in front of the customers.
- Train chefs in how to create exciting and tasty fruit and vegetable appetizers, entrees and desserts.
- Encourage trial of fruit and vegetable offerings through taste tests, discount coupons and direct mail for fruit and vegetable rich menu items.
- Include fruit and vegetables as part of value meals in place of low-nutrition options.
- Include more fruits and vegetables (non-fried) as part of children's menus and offerings.

Objective CAF9: By 2008, increase the number of full-service and fast food restaurants will provide calorie and key nutrient information at point of purchase.

Proposed Partners:

Restaurant Associations; Chefs' Associations; RI Tourism Association; Chambers of Commerce; Kids First; New England Dairy Council

Sample Strategies:

- Develop and disseminate toolkit to assist restaurants in providing nutrient information.
- Advocate for statewide policy requiring full disclosure nutrition information at point of purchase at full-service and fast food restaurants.
- Provide technical assistance and training to restaurant owners to assist them in providing nutrition disclosure.
- Work with Farm Fresh RI to create a "locally grown" certification / labeling system (i.e., proper labeling of fresh fruits and veggies, free marketing and promotional materials for qualified, small grocers and restaurants).
- Include nutrient disclosure as a criterion in Restaurant Award Program.

Objective CAF10: By 2008, increase the number of communities that pass ordinances limiting the density of fast food restaurants in a given area.

Proposed Partners:

Legislators; community coalitions; School Wellness Subcommittees; RI Healthy Schools Coalition; town planners; Statewide Planning; Grow Smart RI

Sample Strategies:

- Advocate for ordinances that limit the density of fast food restaurants in a given area.
- Educate legislators, community coalitions, School Wellness Subcommittees, PTOs and town councils about the need for these regulations and the link between fast food restaurant density and obesity prevalence.
- Provide model ordinances for consideration.
- Mobilize the community to advocate for fast food limits.
- Involve the media in educating the public about the link between fast food outlets and obesity.

Objective CAF11: By 2008, increase the number of grocery stores that implement in-store promotions of healthy foods (e.g. fruits and vegetables).

Proposed Partners:
Grocers; URI Food Stamp Nutrition Education Program; URI Cooperative Extension Program; Farm Fresh RI; Kids First, New England Dairy Council; Tourtellot & Co., Inc.

Sample Strategies:

- Develop training and educational programs for retail associates to deliver fruit and vegetable messages.
- Include retail quality and freshness, handling, storage, health benefits and consumer education in training components.
- Share best practices within the industry on effective fruit and vegetable marketing activities.
- Increase availability and marketing of pre-cut fruits and vegetables.
- Use industry media, marketing and promotional strategies such as coupons, cross product marketing, loyalty marketing, sales events, billboards and radio to promote increased consumption of fruits and vegetables.
- Use integrated produce department promotions such as point of sale materials, periodic samplings and recipe demonstrations, give-aways, discounting, recipe cards implemented over a reasonably long period of time (e.g., more than three months).
- Offer and promote convenient, ready-made meals or meal solutions for shoppers that include an abundance of fruits and vegetables.
- Implement Grocery Store Award program that will recognize grocers who relocate to underserved areas.
- Work with Farm Fresh RI to create a "locally grown" certification / labeling system that will help grocers market fresh produce and other local farm products (i.e., proper labeling of fresh fruits and veggies, free marketing and promotional materials for qualified, small grocers).

Objective CAF12: By 2010, increase the number of public settings (e.g., parks, stores, restaurants, and entertainment venues) with breastfeeding-friendly environments. (RIBC)

Proposed Partners:
Rhode Island Breastfeeding Coalition; La Leche League of Rhode Island; State Breastfeeding Coordinator

Sample Strategies:

- Promote the establishment of breastfeeding-friendly environments in community settings.
- Develop best practice guidelines and resources for communities to establish breastfeeding-friendly environments.
- Develop mechanism to recognize breastfeeding-friendly environments.

B. Community Programs (CP)

Overarching Goal:

Increase the number of communities that implement healthy eating and active living campaigns.

****Objective CP1: By 2008, increase the number of communities and community-based organizations that provide culturally and linguistically appropriate obesity prevention and/or weight management programs that teach hands-on cooking and meal planning skills**.

Proposed Partners:
Community-based organizations; Faith-based organizations; Diabetes Multicultural Coalition; the URI Cooperative Extension Service; URI Food Stamp Nutrition Education Program; Johnson & Wales; RI Minority Health Promotion Centers; YMCAs; Kids First; RI Department of Health WIC Program

Sample Strategies:

- Advocate for new or expanded programs in Minority Health Promotion Centers, faith-based organizations, YMCA's, Meals-on-Wheels and Congregate Meals sites for the elderly, WIC agencies and other community-based organizations.
- Provide evidence-based programs, toolkits, and other resources to community-based organizations to assist in program implementation.
- Provide technical assistance, including resource identification to fund these programs.
- Work with groups/agencies that have either developed or implemented obesity prevention and/or weight management programs (e.g., health insurers, academic research groups, the Diabetes Program, YMCAs; hospitals).
- Identify and disseminate programs to community-based organizations, and provide staff training for implementation.
- Collaborate with Diabetes Educator Program to expand training of peer counselors, and provide toolkits and resources to assist in training program.
- Assist in identifying funding/staff to assist with implementation of programs
- Work with Food Stamp Nutrition Education Program to increase federal funding through matching.
- Assist in adapting existing programs to be culturally and linguistically appropriate for the populations being served.

Objective CP2: By 2008, increase the number of communities that have free or low-cost opportunities for structured physical activity.

Proposed Partners:
Minority Health Promotion Centers, YMCAs, community based organizations, private fitness centers, youth-serving community centers e.g. Boys and Girls Clubs of RI, Salvation Army; faith-based organizations; schools

Sample Strategies:

- Develop a lay physical activity trainer program or utilize existing local programs (YMCA walking leader training, *Growing Stronger* training and program,)
- Develop walking club or fitness group programs, such as pedometer programs or park-based programs
- Develop promotional campaigns to publicize programs.

Objective CP3: By 2008, all local WIC agencies will implement a Breastfeeding Peer Counselor Program and all local WIC agency staff will receive training to provide competent breastfeeding support.

Proposed Partners:
Local WIC agencies; RI Breastfeeding Coalition; State Breastfeeding Coordinator

Sample Strategies:

- Guide local WIC agencies in developing Peer Counselor Programs and protocols.
- Provide WIC staff with multicultural tools and resources for working with breastfeeding mothers.
- Provide technical and advocacy skills in breastfeeding for WIC staff.
- Train WIC nutritionists and Breastfeeding Peer Counselors (PCs) as Certified Lactation Counselors.
- Provide WIC nutritionists and PCs with information on becoming International Board Certified Lactation Consultants.
- Provide WIC nutritionists and PCs with technical support and training opportunities to pursue IBCLC certification.

Objective CP4: By 2008, increase the number of WIC agencies that implement a breast pump distribution program and that implement other breastfeeding-friendly policies and environments.

Proposed Partners:
Local WIC agencies; State Breastfeeding Coordinator

Sample Strategies:

- Advocate for the increased availability of breast pumps through WIC local agencies.
- Partner with private pump distributors to assist in implementation of breast pump distribution program in WIC local agencies.

- Identify potential funding sources for breast pump distribution program.
- Train local WIC agency staff members on pump distribution and education.
- Develop a statewide policy for breast pump distribution through the local WIC agencies.
- Develop breast pump distribution policies, protocols and training materials for WIC staff and pumping clients.
- Provide training to local WIC agencies on implementing breast pump program.
- Provide ongoing technical assistance to WIC agencies regarding breast pump program.
- Develop and implement state WIC breastfeeding policies and guide local agencies in developing breastfeeding policies.
- Encourage and provide technical assistance in the establishment of breastfeeding-friendly clinic environments including space for mothers to breastfeed.

Objective CP5: By 2008, increase the number of community-based organizations that implement policies or programs to reduce screen time.

Proposed Partners:
YMCAs; Boys and Girls Clubs; Faith-based and other community agencies that serve youth; Parent-Teacher Organizations

Sample Strategies:
- Supply organizations with model screen time reduction programs, practices and guidelines.
- Provide leader trainings for staff implementing model programs
- Develop and supply toolkit for TV Turnoff week.
- Develop a campaign to promote TV Turnoff Week.

Objective CP6: By 2008, increase the diversity and quantity of membership in the Rhode Island Breastfeeding Coalition.

Proposed Partners:
RI Breastfeeding Coalition; wide diversity of community groups and organizations

Sample Strategies:
- Partner with wide diversity of community groups and organizations.
- Identify and invite representatives to attend RIBC meetings.
- Encourage and sustain active partnerships.

C. Community Access to Physical Activity (CAP)

***Objective CAP1: By 2008, increase the number of communities that have new or revitalized parks or trails.**

Proposed Partners:
Greenways; RI Department of Transportation; Statewide Planning;, Local planners; RI Department of Environmental Management; Sierra Club; Municipalities; Parks and Recreation Departments

Sample Strategies:

- Raise awareness about the possibilities for maintaining, developing, or connecting trails.
- Work with community groups to maintain parks and trails
- Link facilities to ongoing programs and organizations for continued support
- Identify non-traditional recreation spaces (e.g., farms, schools) and work with owners to open areas to the public **.
- Provide model regulations for comprehensive plans that include conserving open space, building parks and trails, and ongoing maintenance **.
- Include well-maintained, new, or revitalized parks as criterion in Governor's Community Awards Program.
- Assist organizations with grant applications for park renovation, as well as model park-passed programs
- Develop a campaign to raise awareness of the state's parks and trails.
- Sponsor park clean ups.
- Invite media to attend and publicize renovations and new facilities.

*** **Objective CAP2: By 2008, increase the number of communities with land management systems that support physical activity.**

Proposed Partners:
Statewide Planning; DOT; *Grow Smart RI,* Sierra Club; Local Planners

Sample Strategies:

- Present at community meeting about the link between the built environment and health and the economic benefits of well planned communities
- Educate decision makers about the benefits of smart growth and how it can be accomplished
- Involve community members in decisions that involve community development
- Develop/provide model comprehensive plans and other best practices
- Include land management systems as criterion in Governor's Award Program.
- Support tax incentives for development that supports smart growth
- Educate schools and decision makers about school siting issues
- Highlight model communities and successes through media

***Objective CAP3: By 2008, increase the number of communities that complete street scale design projects that improve walkability.**

Proposed Partners:
Statewide Planning; RI Department of Transportation; *Grow Smart RI*, Sierra Club; Local planners

Sample Strategies:

- Present at community meetings about the health and economic benefits of walkable communities
- Involve community residents in projects from planning to implementation
- Partner with businesses to increase walk-by traffic and advocate for pedestrian friendly services
- Hold walkable community workshops to educate and inform communities about potential funding opportunities
- Include street scale design as a criterion in Governor's Community Award Program.
- Share project ideas with partners and residents

Health Care (H)

Approximately 80% of the US population sees a physician at least once a year. During these interactions, providers are in a unique position to influence the health behaviors of their patients and their families. Health care providers and health insurers have a critical role to play in both the prevention and treatment of overweight and obesity. Health care providers can routinely track Body Mass Index (BMI) and offer relevant evidence-based counseling and anticipatory guidance regarding nutrition and physical activity. Research indicates that people who have been counseled by their physician to lose weight are more successful that those who have not. Many professional organizations have recommended that providers assess and routinely counsel patients on weight status, nutrition, breastfeeding, physical activity levels, and screen time . Professional organizations can disseminate evidence-based clinical guidance and establish programs on obesity prevention. Training programs and certifying agencies can require obesity prevention knowledge and skills in their curricula and examinations. Medical and allied health professional training schools and continuing education programs can include training in obesity prevention (nutrition and physical activity) counseling and treatment.

Insurers play a vital role in ensuring access to supports for nutrition, breastfeeding, and physical activity. Insurers and accrediting organizations can increase coverage for obesity prevention services and provide incentives for maintaining a healthy body weight. Obesity prevention (nutrition and physical activity) screening and counseling services can also be included in routine clinical practice and quality assessment measures.

The health care system also has an important role to play in the promotion and support of breastfeeding. All health care providers who interact with women or infants should be knowledgeable about the basics of lactation and how their specialty impacts breastfeeding practices. Maternity care facilities can implement policies and practices that support breastfeeding mothers. Medical and allied health professional training schools and continuing education programs can include evidence-based breastfeeding training in their curricula. Health insurers can increase coverage for breastfeeding services and equipment.

Short-Term Objectives in Health Care

A. Nutrition and Physical Activity Objectives

***Objective H1: By 2008, increase the number of healthcare providers who assess nutrition and physical activity and provide culturally and linguistically appropriate counseling about healthy eating and physical activity at annual preventative visits**.

Proposed Partners:
NECON; Professional Associations; Rhode to Health Coalition; Blue Cross Blue Shield of RI; United Healthcare; Neighborhood Health Plan of RI; Professional Boards; Licensing Boards

Sample Strategies:

- Participate in NECON's pilot reimbursement/physician training program in which a web-based 'obesity prevention and control' clearinghouse will be created, housing a state-of-the-art self-study program for clinicians in obesity prevention and lifestyle counseling. The program will offer CME credit, and lead to 'credentialing' in obesity prevention counseling. Insurers (private and/or public) will then be asked to reimburse the obesity/lifestyle counseling of 'credentialed' providers, knowing that such providers have been instructed in the best available counseling techniques/approaches. Further, the website will provide standard quality control indicators (e.g., age and sex-adjusted BMI relative to standard growth curves for the pediatric population) to be included in the medical record as an indication that counseling conforms the highest standards. Insurers will be able to track these indicators in chart audits as a means of assessing process.
- Advocate to include training in culturally appropriate, obesity prevention (nutrition and physical activity) assessment, counseling and treatment in medical and allied health professional schools' curricula and in continuing education requirements for health care providers in Rhode Island.
- Assist professional health associations in the creation and dissemination of clinical guidance and other professional resource materials on obesity prevention and nutrition and physical activity assessment and counseling.
- Partner with professional health associations to advocate for health insurers, health plans and quality improvement and accrediting organizations to include obesity screening and prevention services (BMI assessment, interpretation and feedback, dietary and physical activity assessment, counseling and referral) in routine clinical practice and in quality assessment measures relating to health care.
- Collaborate with professional boards and licensing and certification bodies to ensure that minimum competencies in obesity prevention and weight management are established and adopted and that appropriate questions and skills assessments are included as part of the existing licensing, registration and certification procedures.

***Objective H2: By 2008, increase the number of health care providers who refer patients with unhealthy eating patterns to nutritionists and with low physical activity levels to community resources.**

Proposed Partners:
Professional Health Associations; NECON; RI Diabetes Program

Sample Strategies:

- Assist professional association in developing and disseminating best practices obesity prevention referral guidelines and obesity prevention resource manual of available services.
- Collaborate with professional associations to provide training for health care providers regarding referral guidelines and best practices.
- Provide ongoing technical assistance in implementation of referral guidelines.
- Update and disseminate obesity prevention resource manual of available services annually.

Healthy Weight Objectives

Objective H3: By 2008, increase the number of health care providers who routinely measure height and weight, calculate Body Mass Index (BMI) and provide feedback and interpretation of BMI to patients at annual preventive visits.

Proposed Partners:

NECON; Professional Boards; Licensing and Certifying Boards; Brown University Medical School; Nursing Schools

Sample Strategies:

- Collaborate with professional boards and licensing and certification bodies to ensure that minimum competencies in BMI measurement and counseling are established and adopted and that appropriate questions and skills assessments are included as part of the existing licensing, registration and certification procedures.
- Collaborate with NECON to make BMI a reported vital sign for the New England region.
- Include training in BMI assessment and counseling in health care professional schools, postgraduate training programs, continuing professional education programs, professional organizations and certifying entities in their curricula and examinations.
- Participate in implementation of NECON's web-based template vital sign intake form and BMI tracking form.
- Advocate for insurers to track BMI in charts as a quality control measure.
-

***Objective H4: By 2008, increase the number of health insurers that reimburse physicians, nurses, and nutritionists for routine BMI assessment, interpretation and feedback, and counseling regarding nutrition and physical activity.**

Proposed Partners:

NECON; Professional Associations; Blue Cross Blue Shield of RI; United Healthcare; Neighborhood Health Plan of RI

Sample Strategies:

- Participate in NECON pilot physician training/reimbursement program.
- Advocate for mandatory insurance coverage for obesity prevention services, weight management programs and nutrition and physical activity counseling.
- Share cost-benefit information with health insurers.
- Advocate for health insurers, health plans and quality improvement and accrediting organizations to include obesity screening and prevention services (BMI assessment, interpretation and feedback, nutrition and physical activity assessment, counseling and referral) in routine clinical practice and in quality assessment measures relating to health care

***Objective H5: By 2008, increase the number of insurers that discount insurance premiums for employers offering obesity prevention and/or weight management programs.**

Proposed Partners:

NECON; Health professional associations; Blue Cross Blue Shield of RI; United Healthcare; Neighborhood Health Plans of RI; Worksite Wellness Council of Rhode Island

Sample Strategies:

- Encourage insurers to discount health insurance premiums for employers offering health promotions programs and for participating employees.
- Provide cost benefit presentations to health insurers that highlight increased productivity, decreased absenteeism, decreased disability and decreased medical costs of healthy weight employees.

Breastfeeding Objectives

***Objective H6: By 2012, all maternity care hospitals in Rhode Island will implement at least five (5) of the UNICEF/WHO Baby-Friendly Hospital Initiative's "Ten Steps to Successful Breastfeeding."**

Objective H7: By 2010, increase the number of maternity care hospitals in Rhode Island that are designated as Baby-Friendly in accordance with the UNICEF/WHO Baby-Friendly Hospital Initiative.

Proposed Partners:

RI Breastfeeding Coalition; Physicians' Committee for Breastfeeding in RI; RI Department of Health; Maternity Care Hospitals

Sample Strategies:

- Promote the evidence and *Ten Steps to Successful Breastfeeding* to hospitals and affiliated providers in Rhode Island.
- Send a letter endorsed by the RI Department of Health and the RI Breastfeeding Coalition with the RI Department of Health Director's signature encouraging all birthing hospitals not yet certified to adopt the Baby Friendly Hospital Initiative (BFHI).
- Monitor hospital responses regarding adoption of BFHI.
- Provide technical support to hospitals interested in initiating the BFHI certification process and providing 18-hour course for staff.
- Involve hospital boards, administrators and affiliated physicians as needed for approval and support, utilizing administrators from Baby-Friendly certified South County Hospital, Newport Hospital and Boston Medical Center.

***Objective H8: By 2010, all Rhode Island health insurers will increase their standard, reimbursable service coverage for lactation support services, breastfeeding classes, and breastfeeding equipment (e.g. breast pumps).**

Proposed Partners:
Physicians' Committee for Breastfeeding in RI; RI Breastfeeding Coalition; RI Department of Health; Maternity Care Hospitals; Blue Cross Blue Shield of RI; United Healthcare; Neighborhood Health Plan of RI

Sample Strategies:
- Collaborate with the three major health insurers of Rhode Island: Blue Cross Blue Shield, United Healthcare and Neighborhood Health Plan of Rhode Island to advocate for enhanced coverage of breastfeeding services and equipment.
- Encourage and provide technical support for insurers to provide additional breastfeeding benefits.
- Identify and enhance ways that insurers notify consumers and providers about benefits (e.g., subscriber education packets, subscriber newsletters, magazines, physician bulletins).
- Promote the Rhode Island Breastfeeding Coalition and the Physicians' Committee for Breastfeeding in Rhode Island as experts for consultation on breastfeeding issues.
- Update benefit criteria grid biannually.

Objective H9: By 2008, increase the number of maternal and child health care providers who become Certified Lactation Counselors (CLCs).

Proposed Partners:
RI Breastfeeding Coalition; State Breastfeeding Coordinator; Local WIC agencies; Birthing hospitals; Health care organizations

Sample Strategies:
Coordinate, promote, and conduct CLC trainings for up to 75 local health care professionals annually.

Objective H10: By 2012, culturally appropriate, evidence-based breastfeeding training will be integrated into continuing education requirements for all maternal and child health nurses and into the curriculum at all health professional schools in Rhode Island.

Proposed Partners:
RI Breastfeeding Coalition; Physicians' Committee for Breastfeeding in RI; State Breastfeeding Coordinator; Medical schools; Nursing schools; Accrediting organizations

Sample Strategies:
- Evaluate existing education available through medical and nursing schools and accreditation requirements related to breastfeeding.
- Develop training recommendations for educational institutions and certifying recommendations for accrediting organizations.
- Provide technical assistance to partners to maintain accreditation standards.

Objective H11: By 2008, implement a system that enables breastfeeding mothers to receive in-home lactation consultation with International Board Certified Lactation Consultants (IBCLCs).

Proposed Partners:
State Breastfeeding Coordinator; RI Department of Health Family Outreach Program; Visiting Nurse Agencies (VNAs)

Sample Strategies:
- Collaborate with HEALTH Family Outreach Program VNAs to institute home IBCLC visits for mothers receiving lactation referrals from home visiting nurses.
- Train VNA nurses as Certified Lactation Counselors.
- Provide funding for VNA nurses to take the International Board Certified Lactation Counselor exam.
- Provide technical assistance and support for VNAs to develop implement referral protocol for IBCLC home visits.

Objective H12: By 2010, increase the number of maternity care hospitals, private clinical practices, and commercial pharmacies in Rhode Island that implement an online breastfeeding pharmacology program.

Proposed Partners:
Physicians' Committee for Breastfeeding in RI; URI School of Pharmacy; Commercial pharmacies; Professional pharmacist organizations.

Sample Strategies:
- Network with partners to educate them about breastfeeding.
- Promote the widespread use of Thomas Hale's "Medications and Mother's Milk" resource guide and online breastfeeding pharmacology resources.
- Work with URI to take on breastfeeding pharmacology as a clinical project and to integrate use of Hale into the curriculum.

- Seek funding from CVS Headquarters to provide and distribute "Medication and Mother's Milk" books to all CVS pharmacies.
- Collaborate with pharmacist partners to promote breastfeeding pharmacology and education through their professional organizations.

Objective H13: By 2012, increase the number of maternity care hospitals, public health clinics, and facilities that implement policies that ban the use of informational and educational materials provided by or bearing the logos of infant formula manufacturers.

Proposed Partners:
RI Breastfeeding Coalition; Physicians' Committee for Breastfeeding in RI; Professional Associations

Sample Strategies:
- Advocate for enforcement of the WHO Code for the Marketing of Breast Milk Substitutes (the Code).
- Educate hospital administrators, public health clinic administrators, and private physicians about the evidence base regarding the negative effect of formula marketing on breastfeeding rates and duration.
- Provide technical assistance to facilities to assist them in implementing the Code.
- Publicly recognize facilities that comply with the Code.

Mental Health Objectives

Objective H14: By 2008, improve access to culturally appropriate mental health and behavioral services across the lifespan to break the cycle of obesity associated with depression, anxiety, and related disorders.

Proposed Partners: (Kathy)
Sample Strategies: (Kathy)

Worksites (W)

Worksites provide many opportunities to reach a large number of adults and to reinforce and promote healthy behaviors. Whether through a broad worksite wellness program or through specific initiatives, employers can create a workplace environment that provides many occasions to increase employees' motivation, opportunity and ability to choose healthful foods and to be physically active. Promoting and facilitating healthy eating and active living at work is an excellent investment for employers. Over time, it saves costs from diet-related diseases and lost productivity while boosting overall employee health and morale.

A large proportion of women work outside the home and return to work shortly after their baby is born; therefore, the workplace environment should enable mothers to continue breastfeeding as long as the mother and baby desire and to integrate breastfeeding with paid work. Worksite programs that support breastfeeding will facilitate the continuation of breastfeeding after mothers return to work. Providing accommodations and support for breastfeeding mothers offers tremendous rewards for the employer, in cost savings for health care, reduced absenteeism, employee morale, and employee retention.

Research shows that worksite programs that provide both physical activity and nutrition programs are effective in the short term for weight management. These programs typically offer nutrition education, physical activities and self help materials. By combining physical activity and nutrition programming with policies, facilities and benefits that alter the environment to support individual behavior change, these programs may be even more effective in the long term.

Short-Term Objectives in Worksites

* Denotes Worksite Objectives that were identified as priority objectives by the Rhode Island Healthy Eating and Active Collaborative at its first meeting on June 1, 2006.

Healthy Weight Objectives

***Objective W1: By 2008, increase the number of worksites that implement multi-component weight management programs that include both physical activity and nutrition.**

Proposed Partners:
Worksite Wellness Council of Rhode Island; State Employees Wellness Program *Get Fit RI;* YMCA; Chambers of Commerce; Blue Cross, Blue Shield of Rhode Island; United Healthcare; Neighborhood Health Plan of Rhode Island

Sample Strategies:

- Share evidence-based worksite wellness resources, e.g., CDC Worksite Wellness Program, Colorado program, YMCA Stanford Behavior Change Program, etc. with partners.

- Consider including the following evidence-based components: training in behavioral techniques, support groups; prescriptions for aerobic/strength training exercise; provision of self-help materials; tailored educational materials; group or supervised exercise sessions.
- Provide training and technical assistance in program development and implementation to Worksite Wellness Council and Get Fit RI.
- Assist worksites in launching Healthy Eating and Active Living Campaigns.
- Implement worksite recognition/award program.
- Assist worksites in identifying program funding.
- Develop communication plan for advertising worksite programs to employees.

Nutrition Objectives

***Objective W2: By 2008, increase the number of worksites that provide healthy food options for employees in the cafeteria and in vending machines.**

Proposed Partners:
Worksite Wellness Council of Rhode Island; Rhode Island State Employees Wellness Initiative Get Fit RI; Kids First, Inc; Farm Fresh RI; Johnson & Wales University International Culinary Institute

Sample Strategies:
- Adopt state nutrition guidelines at worksites.
- Use incentive based approaches to encourage the sale of fruits and vegetables in vending machines (i.e., pricing strategies that promote fruit and vegetable sales).
- Include healthy food options in cafeterias and healthy vending options as award criteria in the Governor's Worksite Award program.
- Encourage employers to provide a wide variety of fruits and vegetables in cafeterias.
- Provide training and technical assistance for worksite cafeteria staff regarding healthy meal options.
- Advertise and promote healthy meal options at worksites.
- Use incentive based approaches to encourage the sale of fruits and vegetables in cafeterias (i.e., pricing strategies that promote fruit and vegetable sales).
- Assist worksites in identifying vendors who sell healthy vending products; invite worksites to Healthy Food Trade Shows.
- Build relationships with local farmers.
- Provide a wide variety of fruits and vegetables in cafeterias and vending machines and at company functions and meetings.
- Use interventions in state employees' worksites as models for worksites throughout the state.
- Subsidize produce in vending machines and cafeterias by charging a premium on less nutritious items.

- Develop fruit and vegetable worksite initiatives that include activities which create awareness, motivation, social support, and increased availability of fruits and vegetables.

Objective W3: By 2008, increase the number of worksites that implement Healthy Food and Beverage policies for worksite functions, meetings and events.

Proposed Partners:
Worksite Wellness Council of Rhode Island; Rhode Island State Employees Wellness Initiative Get Fit RI; Kids First, Inc; Farm Fresh RI

Sample Strategies:
- Develop model policy and disseminate to Worksite Wellness council and State Employee Wellness Champions; consider CDC policy as model.
- Provide training and technical assistance in the development and implementation of model healthy meeting policy.
- Provide a wide variety of fruits and vegetables at worksite functions and meetings; partner with local farmers.
- Implement catering policies for all company events, including sponsored conferences that require menus with plentiful fruits and vegetables and healthful food preparation techniques.
- Include implementation of a Healthy Food and Beverage Policy as an award criterion in the Governor's Worksite Award Program.

Objective W4: By 2008, increase the number of worksites that implement Farmers' Market programs.

Proposed Partners:
Rhode Island Department of Environmental Management, Division of Agriculture; Farm Fresh RI; Worksite Wellness Council of Rhode Island; University of Rhode Island Cooperative Extension Program and Food Stamp Nutrition Education Program; Johnson & Wales University International Culinary Institute; Chambers of Commerce; School District Wellness Subcommittees

Sample Strategies:
- Recruit and identify worksites that might be interested in implementing Farmers' Markets.
- Provide worksites with training, technical assistance and toolkits for getting Farmers' Markets started.
- Incorporate nutrition education, taste testing and cooking demos at the markets.
- Disseminate recipes and nutrition education brochures at the markets.

- Partner with Johnson and Wales chefs, the Food Stamp Nutrition Education Program, etc. to host fruit and vegetable tasting events at the market.
- Develop and implement communication plan for publicizing the market to employees.
- Develop and implement incentives to increase participation (i.e., raffles, longer breaks, etc.).
- Include implementing a Farmer's Market as an award criterion in the Governor's Worksite Award Program.

Objective W5: By 2008, increase the number of worksites that implement farm-to-worksite programs.

Proposed Partners:
Rhode Island Department of Environmental Management, Division of Agriculture; Farm Fresh RI; Worksite Wellness Council of Rhode Island; Rhode Island State Employees Wellness Initiative, *Get Fit RI*; University of Rhode Island Cooperative Extension Program and Food Stamp Nutrition Education Program; Johnson & Wales University International Culinary Institute; School District Wellness Subcommittees

Sample Strategies:
- Recruit and identify worksites that might be interested in implementing farm-to-worksite programs.
- Provide training, technical assistance, toolkits for Worksite Wellness Council and *Get Fit RI* in how to implement a farm-to-worksite program.
- Provide training, technical assistance and resources for food service providers in worksites.
- Provide ongoing technical assistance as plan is implemented at specific worksites.
- Advocate for legislation that provides tax incentives for businesses to purchase local produce.
- Include implementing a farm-to-worksite initiative as an award criterion in the Governor's Worksite Award Program.

Objective W6: By 2008, increase the number of worksites that provide calorie and key nutrient information at point of purchase.

Proposed Partners:
Worksite Wellness Council of Rhode Island; Rhode Island State Employees Wellness Initiative, *Get Fit RI*; University of Rhode Island Cooperative Extension Program and Food Stamp Nutrition Education Program; Johnson & Wales University International Culinary Institute; School District Wellness Subcommittees

Sample Strategies:

- Provide training and ongoing technical assistance for worksite food service providers regarding how to determine and post key nutrient information.
- Include point of purchase nutrient disclosure as an award criterion in the Governor's Worksite Award Program.
- Develop and disseminate a toolkit to assist worksites in providing nutrient disclosure.

Breastfeeding

***Objective W7: By 2010, increase the number of worksites that implement policies, programs and environments that support breastfeeding mothers.**

Proposed Partners:
Physicians' Committee for Breastfeeding in RI; State Breastfeeding Coordinator; local businesses; Chambers of Commerce; Healthy RI 2010; Worksite Wellness Council of RI; and *Get Fit RI*.

Sample Strategies:

- Research community-based intervention programs for employer outreach to support breastfeeding in the workplace.
- Develop mechanism to recognize and promote breastfeeding-friendly worksites.
- Develop toolkit for local intervention programs (i.e., sample policies and procedures, promotional and instrumental materials for breastfeeding rooms, funding information, training module) to complement pending materials developed by the Maternal and Child Health Bureau.
- Test and adapt materials with community partners, employers and Chambers of Commerce.
- Develop and implement plan to encourage employers to adopt intervention.
- Provide technical assistance and education to employers adopting intervention.
- Produce and distribute materials, and post on HEALTH website.

Physical Activity

Objective W8: By 2008, increase the number of worksites that implement policies, programs or facilities that support physical activity.

Proposed Partners:
Worksite Wellness Council of Rhode Island; Rhode Island State Employees Wellness Initiative, *Get Fit RI*; School District Wellness Subcommittees; YMCAs; local fitness centers

Sample Strategies:

- Utilize Wellness University trainings to teach about evidence based PA policies and their benefits.
- Supply model policies, best practices and guidelines.
- Develop model policies, such as extended breaks or flex time, and incentives such as vacation time or discounts for participation.
- Include in Governor's award.
- Provide ongoing technical assistance and training.
- Look into FitCorp or other onsite providers.
- Supply worksites with best practices and guidelines at Wellness Universities.
- Include as criterion in Governor's Worksite Award Program.
- Identify funding resources for programs and facility renovations, e.g., lockers, bike racks, fitness equipment and/or fitness centers.

Objective W9: By 2008, increase the number of worksites that implement policies or programs that encourage active transportation.

Proposed Partners:
Worksite Wellness Council of Rhode Island; Rhode Island State Employees Wellness Initiative, *Get Fit RI*; Bike Downtown.

Sample Strategies:

- Partner with Bike Downtown and use their worksite coordinator guide and training.
- Replicate their on site coordinator model and expand their materials to cover walking and bussing.
- Advocate for active transportation options or changes that would improve active transportation.
- Provide technical assistance in identifying and training active transport coordinators at worksites.
- Provide ongoing technical assistance to active transport coordinators.
- Provide worksites with education on the benefits of an active trans coordinator, examples of successful programs, etc.
- Develop model policies and offer incentives such as parking buy backs, dress down days, discounted bus passes, etc.
- Provide active transport coordinators with best practices, model policies and guidelines.
- Link employers with RIPTA's worksite programs.
- Identify funding sources for bike racks, showers, stipends for coordinators, etc.
- Develop a social marketing campaign that depicts active transportation as fun, easy, popular, cost beneficial and healthful.

Objective W10: By 2008, increase the number of worksites that offer employee benefit plans that reduce the cost of physical activity programs.

Proposed Partners:

Blue Cross Blue Shield of RI; United Healthcare; Neighborhood Health Plan of RI; Worksite Wellness Councils of Rhode Island; State Employees Wellness Initiative, Get Fit RI

Sample Strategies:

- Partner with insurers to decide how to best promote their top of the line plans with employers.
- Educate employers about benefits of offering these plans at low cost, such as reduced sick time and increased productivity.
- Partner with researchers to pilot this intervention as a research project, possibly through state worksites.
- Providing some kind of incentive to employers who make these plans available to employees.
- Include in the Governor's Worksite Award criteria.

Infrastructure (I)

Successful obesity prevention intervention efforts depend upon first having a statewide infrastructure in place to support and sustain these efforts. The Initiative for a Healthy Weight is establishing an infrastructure for obesity prevention activities at three different levels:

1. A statewide infrastructure through the formation of the Healthy Eating and Active Living Collaborative.

2. A community level infrastructure through grants to communities to establish community coalitions who will develop and implement community-level obesity prevention plans.

3. An objective-focused work group infrastructure to develop and implement action plans for each objective set forth in this plan.

Identifying and creating sustainable funding and resources for obesity interventions will be accomplished in a variety of ways, all of which will be explored and discussed with our advisory committees and workgroups. Funding sources could include, but not be limited to the following:

a. Tax revenues on unhealthy foods and beverages (even infant formula?)
b. Leveraging funding resources among programs
c. Grant applications
d. State allocations
e. Foundations and Philanthropists

Short-Term Infrastructure Objectives

Objective I1: By June, 2006, the Rhode Island Department of Health's Initiative for a Healthy Weight will form the Rhode Island Healthy Eating and Active Living Collaborative to develop and implement a state plan to prevent and reduce obesity in Rhode Island.

Proposed Partners:
NECON; existing coalitions and task forces; other state programs; community based programs; faith-based organizations; universities; academic research institutes; health professional associations; businesses, local planning agencies, health care providers, health insurers;

Sample Strategies:

- Collaborate with NECON and other New England Obesity Prevention Programs.
- Collaborate with existing coalitions and task forces in the state addressing obesity related issues.
- Collaborate with other state programs, academic research institutes, businesses and local planning agencies. Convene all stakeholders interested in working together on obesity prevention at initial meeting of RI Healthy Eating and Active Living Collaborative.
- Solicit final input from Collaborative into state plan and form work groups to implement the plan.
- Identify areas where technical assistance will be needed to implement the state plan.
- Identify and find necessary resources for state plan implementation with a focus on leveraging resources from different funding sources.
- Identify state resources for building and sustaining the collaborative and its work--CDC, tax on junk food and sugar-sweetened beverages, grants, etc.
- Explore the possibility of getting 501c3 status for the Collaborative.
- Submit to CDC for basic implementation funding.
- Develop a mission statement and logo for the Collaborative.
- Publish RI State Plan for Healthy Eating and Active Living.
- Create action implementation teams to implement the state plan objectives.

**** Objective I2: By 2007, six communities will form community coalitions to develop and implement intervention plans to prevent and reduce obesity.**

Proposed Partners:
RI Department of Health, Division of Family Health, Maternal and Child Health Program

Sample Strategies:

- Leverage Maternal and Child Health and CDC funds to provide grants to communities to form coalitions and expand the work of existing coalitions to include obesity related issues.
- Identify/develop a model obesity-related community needs assessment format and share with community coalitions **.
- Provide training and technical assistance to communities regarding completion of the needs assessment and development of a plan to promote healthy eating and active living.
- Assist communities in identifying funding sources for implementation of their plans.

Objective I3: **By 2008, the State of Rhode Island will introduce legislation that imposes a tax on sugar-sweetened beverages and high-fat, snack foods and use said revenues to fund implementation of objectives set forth in the Rhode Island Plan for Healthy Eating and Active Living.**

Proposed Partners:
Rhode Island Department of Health Tobacco Program; advocacy groups and existing coalitions in RI; partners in RI Healthy Eating in Active Living Collaborative

Sample Strategies:

- Work with advocacy groups and Governor's office to develop legislation that would tax the sale of high-fat snack foods and sugar-sweetened beverages and utilize revenues to fund obesity prevention legislation.
- Educate legislators and media about obesity burden in Rhode Island and need to decrease consumption of sugar-sweetened beverages and high-fat snack foods.
- Collaborate with tobacco program staff to utilize lessons learned in tobacco program (e.g., cigarette tax).

Betty, Please review this one. This tax was recommended in the Governor's Wellness Initiative that Bill Waters shared with everyone.

V. Communication

Communication for Obesity Prevention

Communication is an essential component of obesity prevention efforts in Rhode Island. Clear, effective communication with partners, specific target audiences, and the general public can be used to build partnerships, raise awareness, shape public policy, and influence behavior change.

Because of this, communication strategies are essential elements of the obesity prevention objectives presented in the plan. For each objective, communication strategies will be identified as supporting strategies for specific physical activity, nutrition, breastfeeding, and screen time initiatives. By identifying communication strategies at this level, the plan ensures that communication work is tailored to specific interventions and the wants and needs of specific audiences.

At the same time, certain general communication strategies support all objectives in this plan and provide the foundation for moving obesity prevention efforts forward in the state. These overarching communication goals, objectives, and strategies around messaging, media, and communication systems are outlined below, with a reference to how specific communication strategies for physical activity, nutrition, breastfeeding and screen time objectives fit within this overarching framework.

Communications Infrastructure

Communications infrastructure to meet the communication goals and objectives identified in this plan has been established and is currently evolving. Led by the Division of Community Health and Equity's IHW and the Division of Family Health at HEALTH, the Obesity Communications Work Group will take the lead on overarching communication strategies in support of statewide obesity prevention efforts. The team will also provide communications support for physical activity, nutrition, breastfeeding and screen time objectives, strategies and interventions. This support will consist of the following when applicable (and feasible):

- Communications planning and strategy development
- Qualitative and quantitative audience research
- Message and material development and pre-testing
- Web site development and design
- Graphics design and production
- Implementation of communication activities
- Media relations and campaigns
- Monitoring and evaluation of communication activities
- Training in health communication and media relations

The team will draw on the communication expertise in HEALTH's Center for Public Health Communication, the *Collaborative*'s Communications and Media Work Group, and CDC's Nutrition and Physical Activity Communication (NuPAC) Team. In addition, the team intends to form a network of communications experts from CDC-funded states across the nation. Starting

with New England, this network will allow for the sharing of communication research, resources and strategies.

The team uses the following guiding principles for its communication work:

- Coordination & collaboration
- Sustainability
- Cultural and linguistic competency
- Clarity and readability
- Consistency
- Effectiveness
- Diversity of communication channels
- Credibility
- Public need (i.e., message is on point with the target audience, what is most important to them and what they want to know).

Messages

Public health professionals, health organizations and the media must work together to deliver consistent messages targeted to diverse audiences and reaching all levels of the Socioecological Model. Regular and consistent messages encourage healthy behaviors and increase awareness of the need for policies and environments that support healthy behaviors. Messages can be distributed through educational and promotional materials, as well as incorporated into interventions and media activities.

These overarching messages will be used to guide the development and implementation of tailored messages to support physical activity, breastfeeding, screen time and nutrition objectives in all five channels. Messages will be tailored based on the communication channel, the purpose of communicating the message, and the wants and needs of the audience.

Communications Goal 1: Ensure consistent messages about obesity, related risk factors, and obesity prevention programs, policies and environmental changes.

In-Process Objective

Communications Objective 1.1: Increase the number of obesity prevention partners who use consistent messages about obesity, related risk factors, and obesity prevention programs, policies and environmental changes in educational and promotional materials, media activities, and other intervention activities.

- Develop, test, disseminate and promote consistent overarching messages around obesity and related risk factors.
- Develop and disseminate an annual report of obesity prevention obesity prevention programs, policies and environmental changes in the state.

- Provide training on the variety of communication channels available for reaching audiences with messages.

Media

Media is powerful tool and can play an influential role in promoting healthy behaviors. Media can provide visibility and credibility for the obesity issue, as well as help to reach different audiences in the state. Media strategies can be used to increase public awareness of the importance of healthy eating and active living and the need for supportive policies and environments—both critical steps in changing policies, environments and behaviors.

In regards to policy change, one particularly effective media strategy is media advocacy. Media advocacy combines media and community advocacy to advance policy initiatives, such as policy changes around issues of healthy eating and active living. Targeting key decision-makers (the Governor, legislators, company executives, etc.) that have the power to make policy changes, media advocates stimulate community involvement in defining policy initiatives and use community voices to engage key stakeholders to influence the development of public policies. In relation to obesity prevention, media advocacy can be used to affect policies in which all people can have equal access to environments that support healthy eating and active living.

The media activities outlined below provide a foundation of media relations and advocacy for tailored paid and unpaid media campaigns and activities supporting physical activity, breastfeeding, screen time and nutrition objectives and strategies. Media is a necessary, but not sufficient element of a comprehensive program: Media alone will not change social norms or behavior and a program, policy or environmental change without media has no way to grab the public's attention and influence public opinion. Media campaigns and activities can be used to amplify local prevention efforts and create a positive impact in public health.

Communications Goal 2: Improve media coverage of obesity, related risk factors, and obesity prevention programs, policies and environmental changes.

Priority Objectives

Communications Objective 2.1: Increase the amount of quality media coverage of obesity, related risk factors, and obesity prevention programs, policies, and environmental changes.

- Conduct an assessment of media coverage of obesity, related risk factors, and obesity prevention programs, policies, and environmental changes.
- Develop and maintain partnerships with media.
- Develop resources for the media.
- Create speakers bureau of media advocates.

Communications Objective 2.2: Develop a statewide media campaign around healthy eating and active living

Communication Systems

Communication systems provide essential supportive infrastructure for programs, partners, and intervention activities.

Tailored communication systems supporting physical activity, breastfeeding, screen time and nutrition objectives and strategies will be created in the context of overarching communication systems.

Communications Goal 3: Establish effective and diverse communication systems for obesity prevention partners to use to ensure quick dissemination of information.

Priority Objective

Communications Objective 3.1: Increase the number of communication systems that allow obesity prevention partners to share information about obesity, related risk factors, and obesity prevention programs, policies and environmental changes.

- Develop, maintain and promote an obesity prevention website including the following components: Information on obesity and related risk factors; tailored resources and links for worksites, communities, healthcare professionals, schools/childcare, media and the general public; and a forum for IHW and partners to provide information and promote their past and current activities.
- Develop, maintain and promote an obesity partners listserv.
- Develop and disseminate a monthly obesity e-newsletter.
- Develop and maintain a clearinghouse for obesity prevention information and resources.
- Develop, maintain and promote a searchable web-based, statewide directory of community programs and resources in obesity prevention, physical activity, breastfeeding and nutrition.

VI. Surveillance and Evaluation

Evaluation of the Plan

As is clear throughout this document, an overarching principle is that science will inform the development and implementation of interventions to reduce and prevent obesity among Rhode Islanders. Similarly, a clear commitment has been made to use specific information about the Rhode Island population to target initiatives to populations where the need is greatest. IHW and other HEALTH staff will provide on-going technical assistance using the current literature to inform obesity prevention and disseminate best practice models to our partners.

The other important use of science is evaluation, which is an integral component of all implementation activities. The goal of the evaluation is to ensure that objectives and strategies described in the state plan are implemented as planned, that outcome objectives associated with prevalence of obesity, overweight, and all four major risk factors (nutrition, physical activity, screen time, and breastfeeding) and mediating activities impact identified priority populations and communities are measured.

As part of the *Healthy Eating and Active Living Collaborative*, a Data and Evaluation Workgroup has been established, consisting of representatives from work groups, research, and HEALTH staff. This group, in coordination with the Brown University's Institute for Community Health Promotion, will oversee evaluation activities. IHW staff and staff from the Brown University's Institute for Community Health Promotion will develop a separate evaluation plan for Obesity Prevention in Rhode Island with the advice of the work group. Although methods of evaluation and types of data will vary depending on the specific activity, the following evaluation strategies will be used alone or in combination:

- Formative evaluation, including needs assessment surveys, focus groups and individual interviews, will determine what is available and what is needed in the community, and will be used to assess strategies and plans for implementation.

- Process evaluation will assess how strategies are being implemented and received among communities and suggest adjustments in activities and expected outcomes.

- Impact evaluation will assess the changes anticipated at each of the levels of community involvement including communities, schools, worksites, health care providers, health insurers, grocery stores, restaurants, and childcare providers.

- Outcome evaluation will assess if state plan activities have changed the prevalence of obesity, overweight and the four key behavioral risk factors.

For example, an evaluation of school-wide policies for physical activity and healthy eating might include all three evaluation strategies. A needs assessment

survey could determine how many Rhode Island public schools have specific policies in place to support healthy eating and physical activity and barriers to implementing such policies. Process evaluation will assess the number of meetings of the wellness committees, the number of attendees and the actions of the committees. Impact evaluation will monitor how schools develop and implement policies for nutrition and physical activity. Impact evaluation will also measure changes in the percentage of students who choose healthy food options at school meals or participate in after-school physical activity programs before and after a school-wide policy for healthy eating or physical activity is implemented. Outcome evaluation will assess the prevalence of overweight and obese children, as well as the proportion who eat nutritious foods and are physically active.

Not all individual state plan objectives will be evaluated at all three levels, given constraints of time, resources, and staffing. Long-term and intermediate objectives will be tracked, and short term objectives will have, at the least, process evaluations so that activities can be tracked. Efforts will be made to fully evaluate state plan activities whenever feasible. Pilot interventions proposed in the state plan and implemented in the community will have formal evaluation plans, encompassing all three levels of evaluation, to prepare for other applications of the interventions and future dissemination of best practices.

Data

Accurate data are needed to guide the formation of state plan objectives and to assess the success of state plan activities. Progress toward the objectives and strategies outlined in the state plan will be measured by monitoring various data points related to the prevalence of chronic disease and obesity. There are a number of data sources that supply ongoing information to track the prevalence of obesity, its underlying risk behaviors and the health consequences. Some of these data sources provide only national data and others allow us to look specifically at the health of Rhode Islanders. A few even allow tracking at the regional or municipal levels. The following information comes from Rhode Island data.

Existing Data Sources and Limitations to the Current System

Overweight and obesity can be characterized for the State of Rhode Island by data that are currently being collected. While numerous data collections systems are ongoing in Rhode Island, a full compliment of data to currently characterize the prevalence of overweight and obesity, and the state of the major determinants for obesity are lacking for every age group.

For newborns, breastfeeding initiation is collected by the Newborn Developmental Risk Screening system, which is reportable for all cities and towns, but duration of breastfeeding is not determined. Duration is reported for WIC, but this mechanism is only available for low income women. In addition, Rhode Island Pregnancy Risk Assessment Monitoring System (PRAMS), Rhode Island Toddler Wellness Overview Survey (TWOS) and the National Survey of Children's Health (NCHS) all collect breastfeeding data. PRAMS asks whether they ever breastfed, if they are still breastfeeding, and asks about barriers to breastfeeding. TWOS and the NCHS ask if respondents ever breastfed and the duration.

For babies from 12 to 60 months of age (1 to 4 years), the TWOs study estimates weight status for the state for two year olds, but the sampling does not characterize cities and towns. WIC measures weight status for children by cities and towns, but again this mechanism is only available for low income women. No current data collection system characterizes pre-school aged children.

School aged children, have the opportunity to self report their weight and height later in school (middle and high school) through the SALT Survey, the YRBS System, and the National Survey of Children's Health. Younger school age children are not characterized by self report or proxy report of a parent. Self or proxy reported height and weights are associated with clear limitations to the recall of the respondent, and are also associated with biases of underreporting weight for overweight participants, as well as over-reporting weight for underweight participants. No data system characterizes the weight and height status of school age children using measured weight and heights.

A very limited number of nutrition and limited screen time questions are asked of parents in the TWOs and WIC data systems, but these data sources omit physical activity and do not characterize pre-school age children at the city and town level for children of all socioeconomic positions. Nutrition, physical activity and screen time are all addressed using self reported surveys of YRBS, SALT and the National Survey of Children's Health, but the questions are limited in their scope and do not address the behavioral determinants of young school aged children.

For adults, height and weight are reported by individuals over the phone for the BRFSS and the HIS surveys. Both surveys as limited questions about nutrition and physical activity. BRFSS asks about intake of fruits and vegetables and leisure time physical activity, while the HIS queries about frequency of fast food consumption, availability of soda at home, and proximity of a park to the participant's home. Physical measurements of height and weight and full nutrient data collection are not conducted at the state level. Nationally, the NHANES series collects this information to reflect the nation as a whole, but does not provide state or regional estimates.

Rhode Island uses several data sources to track chronic diseases associated with overweight and obesity. Data on the self-reported prevalence of high blood pressure, high blood cholesterol, type 2 diabetes, heart disease, stroke, and asthma come from the Rhode Island BRFSS and the Rhode Island HIS. Rhode Island hospital discharge and mortality data include fields for diabetes, hypertension, heart disease, and stroke—conditions associated with being overweight or obese. Rhode Island cancer registry and mortality data also has fields for cancers that research has shown are associated with obesity. These include postmenopausal breast cancer and cancers of the gallbladder, colon, endometrium, kidney, esophagus, ovary and pancreas.

Over time, change in behavioral outcomes and weight status will show progress toward Rhode Island's state plan objectives for the Initiative for a Healthy Weight (IHW) Program and suggest additional areas for interventions. Additional surveillance system indicators will be selected

based on the feasibility of data gathering, the validity of the measures, and relevance to reducing the prevalence of obesity in Rhode Island.

In sum, the data collection systems in place do not adequately characterize the prevalence of overweight or obesity for any age group and does not provide estimates at the level of the city and town. Characterization of these issues for each major racial/ethnic and socioeconomic group is also not possible with the current data system. Enhancements to the current system, by augmenting current instruments or developing new surveillance systems would better describe the state of obesity, overweight and risk factors, especially by describing the geographic areas or demographic groups at highest risk. More importantly, an augmented system might provide better assessment of intervention projects.

Obesity Related Datasets by Age Group

Dataset	Age Group	Availability and Limitations						
		Weight height	***Nutrition**	**Physical Activity**	**Screen Time**	**Breast-feeding**	**Level of Specificity**	**Potential for Expansion**
Newborn Developmental Risk Screening	Newborn Infants	Measure				☑	City/Town	
RI Pregnancy Risk Assessment Monitoring System (PRAMS)	Adult women of childbearing age					☑	National and State	
National Immunization Survey (NIS)	Children aged 19-35 months	Self-report				☑	National and State	
RI Toddler Wellness Overview Survey (TWOS)	Children aged 2	Self-report	☑		☑	☑	State	
Women, Infant and Children Food Supplement Program (WIC)	Children aged 2-5	Measure	☑			☑	City/Town	
Immunization Program	Children entering kindergarten (aged ~5, 7th grade)	Measure					State	☑
RI Youth Risk Behavior Survey (YRBS)	Adolescents (grades 9-12)	Self-report	☑	☑	☑		State	☑ Middle school piloting underway
School Accountability for Learning and Teaching (SALT)	Elementary, middle and high school students	Self-report	☑	☑	☑		City/Town	
National Survey of Children's Health (RI Data, NCHS)	Children aged <18	Self-report	☑	☑	☑		National and State	
NHANES	Adults and children	Measure	☑	☑			National	
RI Hospital Discharge Data (HDD)	Adults and children (all ages)						City/Town	
RI Health Interview Survey (HIS)	All members of households including children	Self-report	☑	☑	☑		State, Region, large City/Town	
RI Behavioral Risk Factor Surveillance System (BRFSS)	Adults	Self-report	☑	☑			State, Region, large City/Town	
Birth Records (RI Vital Statistics)	Newborn Infants	Measure					City/Town	
Death Records (RI Vital Statistics)	Deaths and causes among adults and children						City/Town	

* Nutrition, physical activity, screen time and breastfeeding questions are noted if any questions exist on these topics. The quality and scope of these questions is not characterized.

Evaluation Strategies:

To measure the anticipated broad set of changes that occur with implementation of the state plan strategies, a battery of new instruments and techniques will need to be considered. The following is a list of possible strategies to be used to evaluate individual activities.

Community Level objectives: facilitated survey of at least two leaders from geographically based set of communities (2 each of 50 communities); facilitators will be IHW staff and community work group members. A second set of surveys will be conducted sampling only underserved communities (2 each of 20 communities).

School Level objectives: Email (online survey) or phone facilitated (if not completed) survey of school district (39 wellness committee members) or school level leaders (WC or school administration); facilitators will be school workgroup committee members and/or nutrition facilitators of WC (group established by HSC).

Worksite Level objectives: Email (online survey), mail or phone facilitated (if not completed) survey of all worksites participating in WWC. Phone survey of 150 randomly selected businesses that do not participate in WWC stratified by business size.

Healthcare Provider Objectives: Email (online survey), mail or phone facilitated (if not completed) survey of ___ randomly selected primary care physicians in Rhode Island.

Health Insurer Objectives: Email or phone facilitated by survey by IHW staff (3 insurers – Blue Cross Blue Shield of RI, United Health Care, Neighborhood Health Plan)

Grocery Store Objectives: In-person facilitated and observational survey of all large grocery stores and a random sample of small, independently owned grocery stores. This could be complete with assistance from health and/or nutrition students.

Restaurant Objectives: In-person facilitated and observational survey of a random sample of restaurants. This could be complete with assistance from health and/or nutrition students.

Childcare Facilities: Email (online survey), mail or phone facilitated (if not completed) survey of ___ randomly selected childcare providers in Rhode Island.

VII. Implementing the Plan

Infrastructure for Implementing the Plan

In a time filled with budget cuts and limited resources, the state will need leadership support, collaboration, and creativity to implement and sustain policy and environmental supports, and community-based programs to prevent and reduce obesity in Rhode Island.

Following the Governor's lead …

IHW's work is guided by Governor Carcieri's goals to improve nutrition, increase physical activity, and decrease the prevalence of obesity in Rhode Island. Through its focus on worksites, IHW will help achieve the Governor's goal of having Rhode Island designated the first "Well State" in the country. Achieving this status requires 20 percent of all employees working for companies that have been certified and designated as "well workplaces" by the Worksite Wellness Councils of America. These goals are part of the Governor's Wellness Initiative, a public-private effort to promote healthy lifestyles for all Rhode Islanders.

Supporting the Health Director's priorities …

IHW has the full support of the Rhode Island Department of Health. After assuming his position, Health Director David R. Gifford, MD, MPH, immediately identified childhood obesity as one of his top health priorities. The Director's Childhood Obesity Initiative is an integral component of IHW's efforts to decrease the prevalence of obesity across the lifespan.

Promoting wellness & eliminating health disparities …

With its placement in the Rhode Island Department of Health's Division of Community Health and Equity, IHW coordinates its activities with wellness efforts across the Department and draws upon the Division's expertise to eliminate health disparities in overweight and obesity, physical activity, nutrition, breastfeeding and screen time. A full time program manager, nutrition coordinator, physical activity coordinator and a communications specialist, in addition to an intervention specialist in partnership with Brown University's Institute for Community Health Promotion, staff the IHW.

Department-wide support for the IHW…

The IHW is a department-wide program coordinated with the childhood and adult obesity prevention initiatives in the Division of Family Health to include: the WIC Program, Family Planning, the Rhode Island Coordinated School Health Program, School Based Health Centers, Early Childhood Development, Community Partnerships, the Disability and Health Program, and the Division of Food Protection (IHW restaurant initiatives). Community-level infrastructure to address overweight and obesity is also important. Through the IHW's CDC cooperative agreement and the Division of Family Health (DFH), IHW and DFH have jointly funded the

development of self-sustaining community coalitions that will take leadership roles in addressing obesity at the local level. IHW provides technical assistance and training to help organizations develop community coalitions, conduct community needs assessments, and develop intervention plans. IHW will provide ongoing assistance during the development, implementation and evaluation of interventions.

Division-wide support for the IHW…

The work of the Division of Community Health and Equity has been reorganized around the following four areas: *Health Promotion and Wellness* to include the Initiative for a Healthy Weight (IHW), Get Fit Rhode Island, Worksite Wellness, Tobacco and Injury Prevention; *Health Disparities* to include Minority Health, Refugee Health, Women's Health and Healthy People 2010; *Chronic Care and Disease Management* to include Diabetes, Arthritis, Asthma, Osteoporosis, Comprehensive Cancer Control, Women's Cancer Screening Program and HIV/AIDS; and *Access to Care* to include Primary Care, Oral Health, the National Health Service Corps' SEARCH Program, Professional Loan Repayment Program and Rural Health. With the exception of Loan Repayment, the IHW closely interfaces with all other programs, as nutrition and physical activity are cross cutting focus areas throughout the Division. Current, select collaborative initiatives include the following:

Health Promotion and Wellness

In June 2005, Governor Donald L. Carcieri launched "Get Fit, Rhode Island*!*" the state employee wellness initiative. This initiative will make a wide variety of wellness programs accessible to state employees at their worksites, reducing the barriers that workers face in leading active and healthy lifestyles. IHW staff work directly with the State Wellness Director to assist in the identification, implementation and evaluation of evidence-based worksite interventions for state employees. In 2006, IHW in collaboration with *Safe Rhode Island* was awarded a Transportation Enhancement grant to develop and implement an active commuting project with Get Fit, Rhode Island.

In collaboration with the Rhode Island Departments of Transportation and Administration, IHW, the Injury Prevention Program and other partners have developed the Safe Routes to Schools Program and an action plan to raise awareness about the program, available funding, and technical assistance to schools and communities interested in improving walkability.

The Bicycle and Pedestrian Safety Collaborative, funded by the Rhode Island Department of Transportation, works in close collaboration with the IHW, the Injury Prevention Program and community partners throughout the state to promote physical activity among children and adults. The Bicycle and Pedestrian Safety Collaborative also collaborates with the Safe Routes to School program to help raise awareness of safe walking and biking by holding a Statewide Walk and Bike to School Day on October 5th.

Health Disparities

The pervasiveness and severity of health problems experienced by racial and ethnic minority populations in Rhode Island led to the passage of the Minority Health Promotion Act in 1992. This act called for the creation of a minority health promotion program to provide health information, education and risk reduction activities to reduce the risk of premature death from preventable diseases in minority populations. The minority health promotion program is a state funded program, which sets aside a portion of its funding for the purpose of awarding grants to not-for-profit community based organizations to develop and implement comprehensive minority health promotion plans. Current grant specifications include a focus on obesity prevention, physical activity and nutrition. Current initiatives include the cross training of IHW and minority health promotion staff in the identification, development/tailoring, implementation and evaluation of culturally and linguistically appropriate, evidence-based physical activity, nutrition and breastfeeding interventions. These initiatives build on both the Department's as well as State's infrastructure to reduce overweight and obesity in racial and ethnic minority populations.

Chronic Care and Disease Management Programs

IHW is working closely with the Chronic Care and Disease Management programs (e.g., Diabetes, Arthritis, Asthma, Comprehensive Cancer Control) on establishing an obesity prevention and control curricula to include modules on nutrition, physical activity, communication and media, and community-based program development, implementation and evaluation. The IHW is collaborating with and drawing on the expertise of the 25-year old Diabetes Prevention and Control Program's Comprehensive Healthcare Improvement Project, the Diabetes Multicultural Coalition, the statewide Certified Diabetes Outpatient Educator Network, the Diabetes and Children Committee and *TEAMWorks*, a half-day diabetes education program, modeled after Kaiser Permanente's successful *Diabetes Morning*. In addition, the initiatives of the Rhode Island *Healthy Eating and Active Living Collaborativ*e both dovetail and are coordinated with those of the Rhode Island Chronic Care Collaborative.

Access to Care

As breastfeeding is one of the state plan's target behaviors, IHW and the Oral Health programs are represented on the Rhode Island Healthy Mothers Healthy Babies Coalition, a partnership of individuals, and professional, voluntary and government organizations devoted to improving the well-being of mothers and babies through education and advocacy. In collaboration with the Oral Health Program, IHW is currently exploring the possibility of conducting a BMI assessment in conjunction with oral health screening of third graders in Rhode Island.

Creating a state-wide infrastructure for obesity prevention …

IHW is partnering with experts in nutrition, physical activity, breastfeeding, communications, data and surveillance, as well as active individuals in early childhood, school, worksite, community, and health care settings on the *Healthy Eating and Active Living Collaborative*. Through the *Collaborative*, IHW will work towards its vision of a Rhode Island where safe and

healthy communities support healthy eating and active living. The *Collaborative*, a "coalition of coalitions", with over 100 members and multiple work groups, will serve as the most important vehicle for 1) solidifying our statewide, community-based infrastructure for implementing and evaluating this plan; 2) coordinating statewide obesity prevention and control efforts; 3) leveraging funding; and 4) ensuring sustainable policy and environmental supports and community-based programs to decrease overweight and obesity among all Rhode Islanders.

Collaborative Implementation of the Plan…

Since 2000, IHW has collaborated with a diverse group of partners to increase physical activity, improve nutrition, increase breastfeeding and reduce screen time in early childhood, schools, worksites, communities and healthcare settings, with a focus on sustainable environmental and policy changes, and community-based programs to prevent and reduce obesity among all Rhode Islanders. Quarterly meetings of the *Healthy Eating and Active Living Collaborative* provide an opportunity for everyone implementing this plan to work together on collaborative projects via work groups. The *Collaborative* also serves as a forum for networking, sharing information and emerging best practices, and providing technical assistance to community partners.

To support the Collaborative, IHW will provide ongoing technical assistance in identifying additional sources of funding, provide ongoing training and best practices on issues related to healthy eating and active living, support communication and collaboration between partners, and assist with community-based needs assessments, and the development of intervention and evaluation plans. Quarterly meetings of the entire Collaborative, more frequent meetings of the workgroups, and a monthly partner newsletter will ensure that communication and collaboration between partners is sustained.

Take Action with Us!

- Identify areas in your school, after school program, childcare facility, worksite, community organization, local government, or health care organization where you can improve educational opportunities, facilities, or policies to support healthy eating and physical activity. Review the objectives and strategies in the plan and identify which ones best fit the needs of your organization.

- Become a member of the *Healthy Eating and Active Living Collaborative* member by completing and submitting the form on the following page.